THE
HOME KNOWLEDGE
ATLAS.
GEOGRAPHICAL ASTRONOMICAL
HISTORICAL
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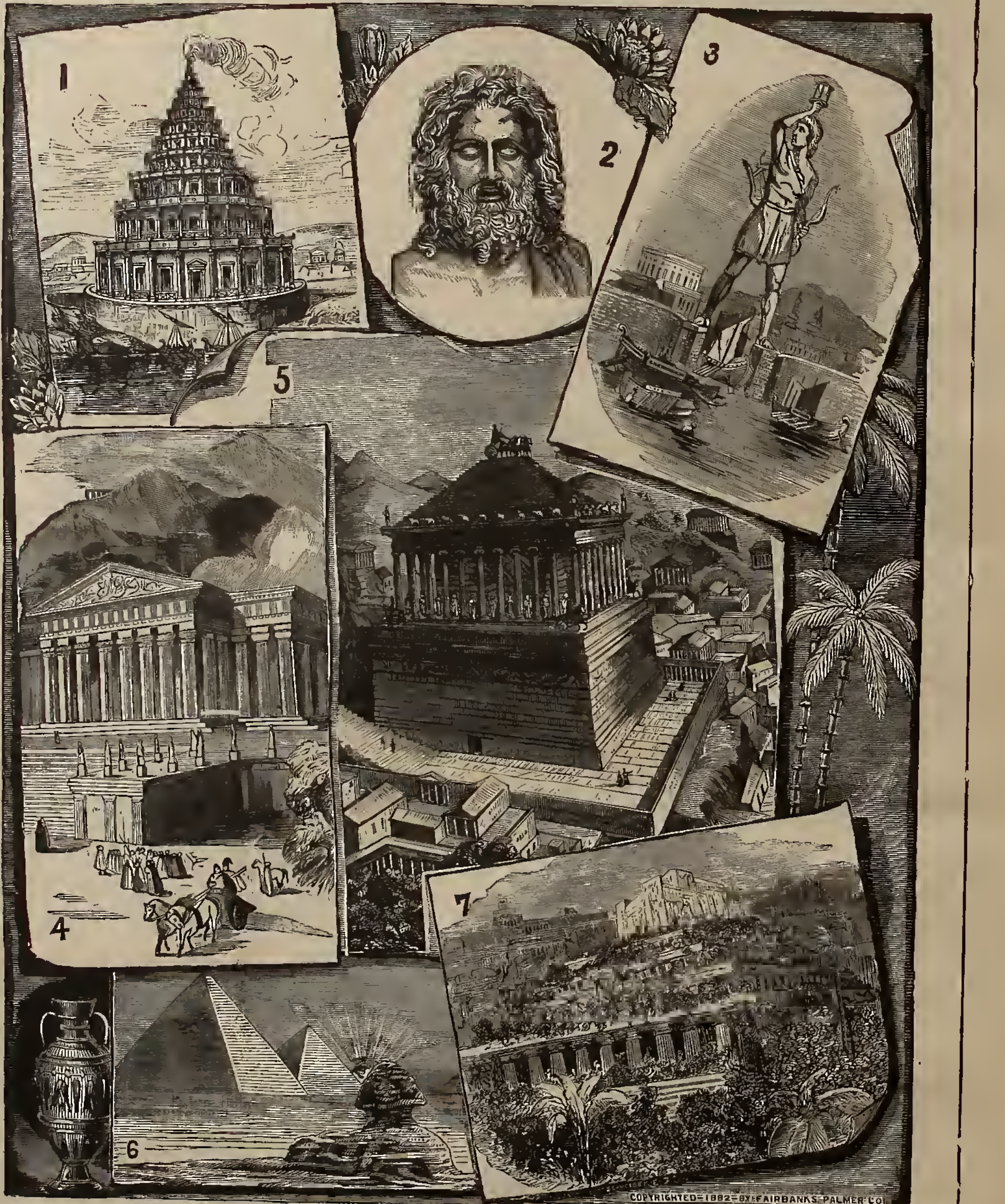
THE SEVEN WONDERS OF THE WORLD.



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The Seven Wonders of the World in ancient times, reckoned to be 1. The Pharos. 2. Statue of Jupiter. 3. Colossus of Rhodes; 4. Temple of Diana. 5. The Mausoleum of Artemisia. 6. The Pyramids of Egypt. 7. The Hanging Gardens of Babylon. *See Illustration.* The following is the generally accepted history of the SEVEN WONDERS OF THE WORLD:

1. **Pharos** was the ancient name of a small island off the coast of Egypt, not far from the ancient city of Alexandria, and connected with the mainland by a mole. It was famous for its lighthouse. The building was the frustrum of a square pyramid surrounded by a large base, the precise dimensions of which are not known. It was commenced by the first Ptolemy and was finished about 280 years before Christ. The style and workmanship are represented to have been superb, and the material was of white marble. It is stated by Josephus that the light which was always kept burning on its top at night was visible forty-one miles. This great lighthouse was probably destroyed by an earthquake, but nothing is known of the date of its destruction. The tower existed 1600 years.

2. The colossal **Statue of Jupiter** in the temple of Olympia at Elis, was by the Greek Phidias. It was in gold and ivory, and sat enthroned in the temple 800 years, and was finally destroyed by fire about A. D. 475. An imitation of the head is preserved in the British Museum and that is all that remains to us of that prodigy of art. Mr. Frothingham, speaking of the artist Phidias, says: "He was a man of lofty soul, majestic intellect, consummate knowledge of the principles of his art, and wonderful skill in design."

3. The **Colossus of Rhodes.** The city of Rhodes was besieged by Demetrius Poliorcetes, King of Macedon, but, aided by Ptolemy Soter, King of Egypt, the enemy were repulsed. To express their gratitude to their allies and to their tutelary deity, they erected a brazen statue to Apollo. It was 105 feet high, and hollow with a winding staircase that ascended to the head; after standing fifty-six years it was overthrown by an earthquake, 224 years before Christ, and lay nine centuries on the ground, and then was sold to a Jew by the Saracens, who had captured Rhodes about the middle of the seventh century. It is said to have required 900 camels to remove the metal, and from this statement it has been calculated its weight was 720,000 lbs. The execution of this stupendous work of art is attributed to Charus of Lindus.

4. The **Temple of Diana** at Ephesus was built at the common charge of all the Asiatic States. The chief architect was Chersiphon. Pliny says that 220 years were employed in completing the temple whose riches were immense. It was 425 feet long, 225 broad, and was supported by 127 columns of Parian marble (sixty feet high, each weighing 150 tons) furnished by as many kings. It was set on fire, on the night of Alexander's birth, by an obscure person named Erostratus, who confessed on the rack that the sole motive which prompted him was the desire to transmit his name to future ages. The temple was again built, and was once more burned by the Goths in their naval invasion, A. D. 256.

5. The **Mausoleum at Halicarnassus.** This magnificent structure was erected by Artemisia, who was the sister, wife and successor of Mausolus king of Caria, 353 B. C. It was a rectangular building surrounded by an Ionic portico of thirty-six columns, and surmounted by a pyramid rising in twenty-four steps, upon the summit of which was a colossal marble quadriga with a statue of Mausolus. This statue is now in the British Museum. It was probably overthrown between the 12th and 14th centuries.

6. The **Pyramids** were some 70 in number. Seven of these are at Gizeh, five at Abusir, eleven at Sakkara, five at Dashur and the remainder scattered throughout Egypt. They were constructed of blocks of red or syenitic granite, and of a hard calcareous stone. These blocks were of extraordinary dimensions, and their transportation to the sites of the pyramids and their adjustment in their places, indicate a surprising degree of mechanical skill. An eminent Egyptologist describes as follows the method of pyramid building: "First the nucleus was formed by the erection of a small pyramid upon the soil of the desert. It was built in steps, and contained a stone chamber, well constructed and finished. Then coverings were added until the final size was reached, and at last all was inclosed in a casing of hard stone, deftly fitted together and polished to a glassy surface. The pyramid, thus finished, presented a gigantic triangle on each of its four sides. The stone used for the inner structure was found near the place of erection, but as the work progressed, better material was brought from the mountain quarries as far up the Nile as the modern Assonan." The granite last referred to was as hard as metal, and susceptible of an exquisite polish. The date of the construction of the Great Pyramid is a subject of conjecture, and authorities widely differ in their conclusions. It is supposed that it was erected as a Mausoleum for Cheops of the fourth Egyptian Dynasty, who reigned about 3800 B. C. It is 746 feet square at its base, 450 feet 9 inches high. The interior contains what is called the King's Chamber and the Queen's Chamber, in which sarcophagi the bodies of the sovereign and his queen were found, and numerous small chambers. See further description of Pyramids, as given in the Tables of Reference.

7. The **Hanging Gardens of Babylon.** The famous hanging gardens were built, according to some writers, by Nebuchadnezzar to gratify his wife Amytis, a native of Media, who longed for something in that flat country to remind her of her mountain home. These gardens consisted of an artificial hill 400 feet on each side, rising by successive terraces to a height which overtopped the walls of the city. The terraces themselves were formed of a succession of piers, the tops of which were covered by flat stones sixteen feet long and four feet wide. Upon these were spread beds of matting, then a thick layer of bitumen covered with sheets of lead. Upon this solid pavement earth was heaped, some of the piles being hollow, so as to afford depth for the roots of the largest trees. Water was drawn from the river Euphrates to irrigate these gardens (this was contained in a large reservoir at the summit). The whole thus appeared like a pyramidal hill covered with verdure.

THE

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TORONTO:
HOME KNOWLEDGE ASSOCIATION

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PUBLISHERS' PREFACE.

IN every home and at every place of business, a Dictionary, an Encyclopedia and an accurate Atlas must ever stand first among the important books of reference.

At no previous time in the world's history has the importance of a knowledge of physical, political and commercial geography, and the history of the nations of the world, been more necessary than now. That great public factor—the newspaper—is, and must continue to be, the chief source of that knowledge of current events which is indispensable to every intelligent person. Its general news, foreign items and articles, necessarily assume that the reader possesses a knowledge of certain geographical, historical and statistical facts. It is the aim of this work to present and impress these facts.

Not only is this an age of rapid changes in political and commercial geography, but it is at once a busy and inquiring one. The thirst for knowledge among the masses is greater than the time to devote to its attainment, hence the demand for a work embracing important matters of a fixed and determined character. To this end our editor has made a careful selection, arrangement and construction of topics covering the entire range of physical and political geography; the history, finance, commerce, agriculture, mining, manufactures, suffrage, politics and education of the nations of the civilized world, wherewith to secure at once a work of ready reference and at the same time a volume of interest which shall be acceptable to the people and of service to all who are interested in the public affairs of nations.

A celebrated American historian has said that "History should never be studied without the aid of an accurate Atlas." It is also assumed that an atlas should not only be accurate but that it should contain the very latest information and be comprehensive in character. Such is claimed for this work; the maps, descriptive, historical and statistical matter being brought down to the date of issue, and will be found to contain a much greater amount of information than any other similar work published.

In addition to Maps of the several Countries, States and Provinces, it contains many Historical and other Maps found in no other Atlas published; also, Maps on a large scale of the principal Cities of the United States and other countries. This is a new feature, and will add greatly to the value of the work as a "Reference Atlas."

The Statistical matter occupies nearly one hundred pages, and covers all of the vast field of more important tabular information. These Statistics are graphically illustrated by over one hundred instructive Charts or Diagrams, printed in colors. This is followed by an interesting Political History of the United States, from 1607 to the present time, illustrated by a large double page colored diagram, showing the Rise and Fall of Political Parties in the United States.

In connection with the Statistical matter a full and accurate Chronological History of the world, from the creation to the present time, is given. The subject is illustrated by over one hundred Historical Maps, presenting the fullest and most comprehensive historical chronology ever published, and contains the very essence of all history. From these statistical tables one may gain a better general idea of the history of the world, and the rise and fall of the various nations, than by years of research through the ponderous volumes of history.

The Descriptive matter is especially valuable. In this department will be found a full and exhaustive description of the different Countries, Kingdoms, Provinces, Islands, States and Territories of the world—detailing their history, showing the variations of soil and climate, describing their agricultural and manufacturing industries, their local products, commercial advantages, social conditions, educational standing, established religions and forms of government, population, habits of people, etc., the whole forming a complete GEOGRAPHICAL ENCYCLOPEDIA, presented in an attractive form, and richly embellished with elegant engravings illustrative of the subject.

This work contains an elaborate and carefully compiled Alphabetical Index of every county, town, village, hamlet and postoffice in the United States, giving their location on the several maps and population at the present time, indicating county towns, express offices, and places where there is no postoffice. In this alone it is far superior to, and is unrivaled by, any Atlas published.

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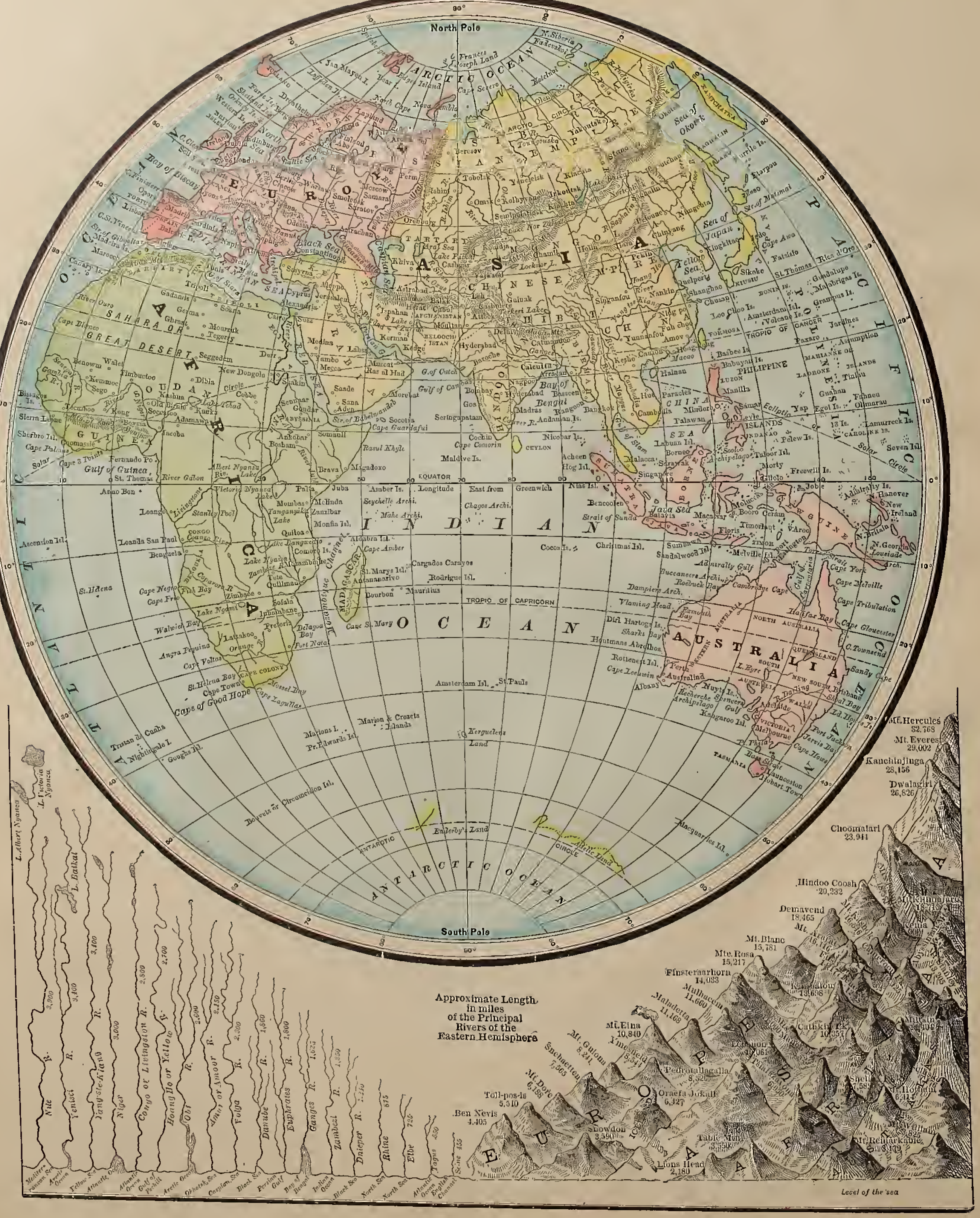
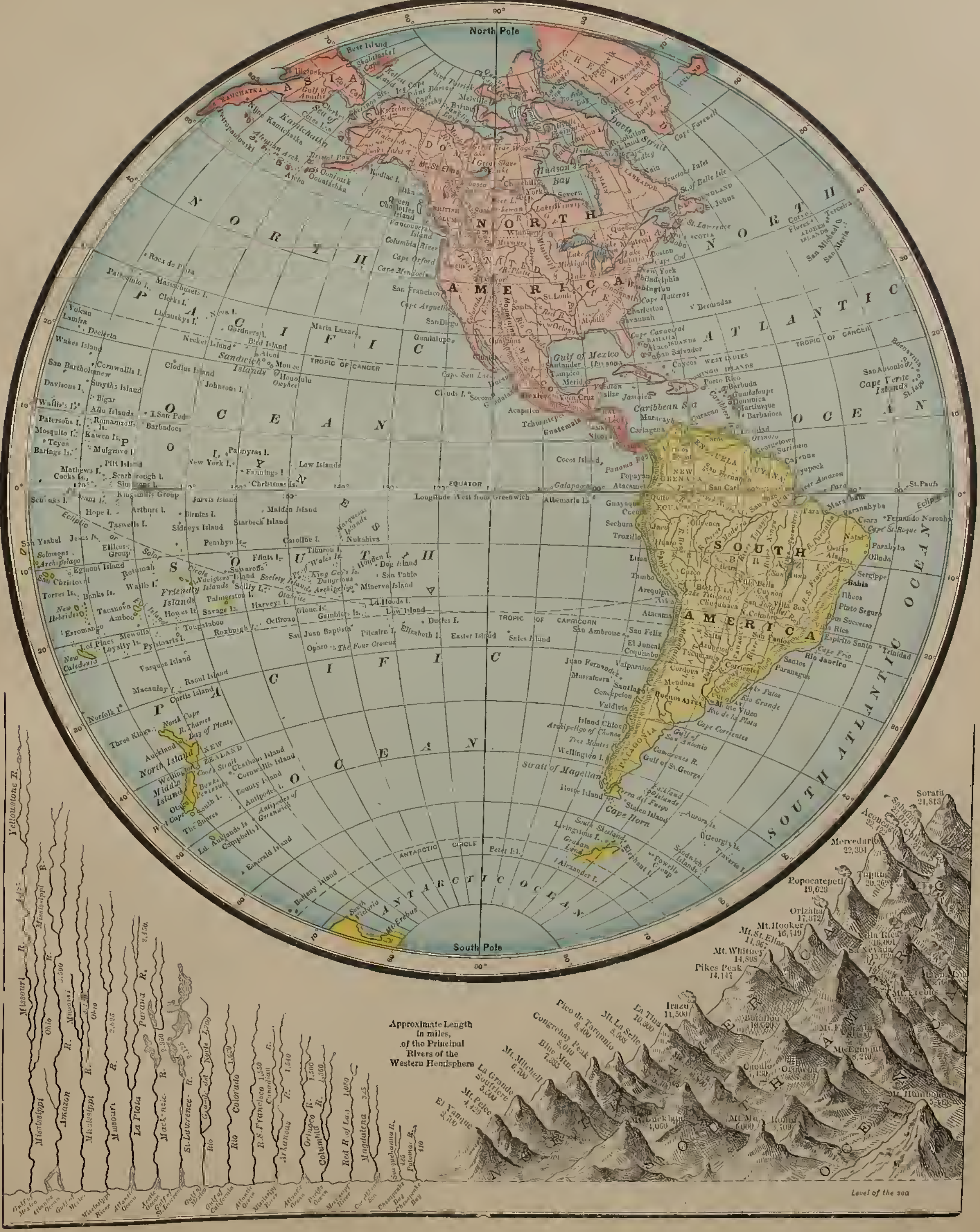
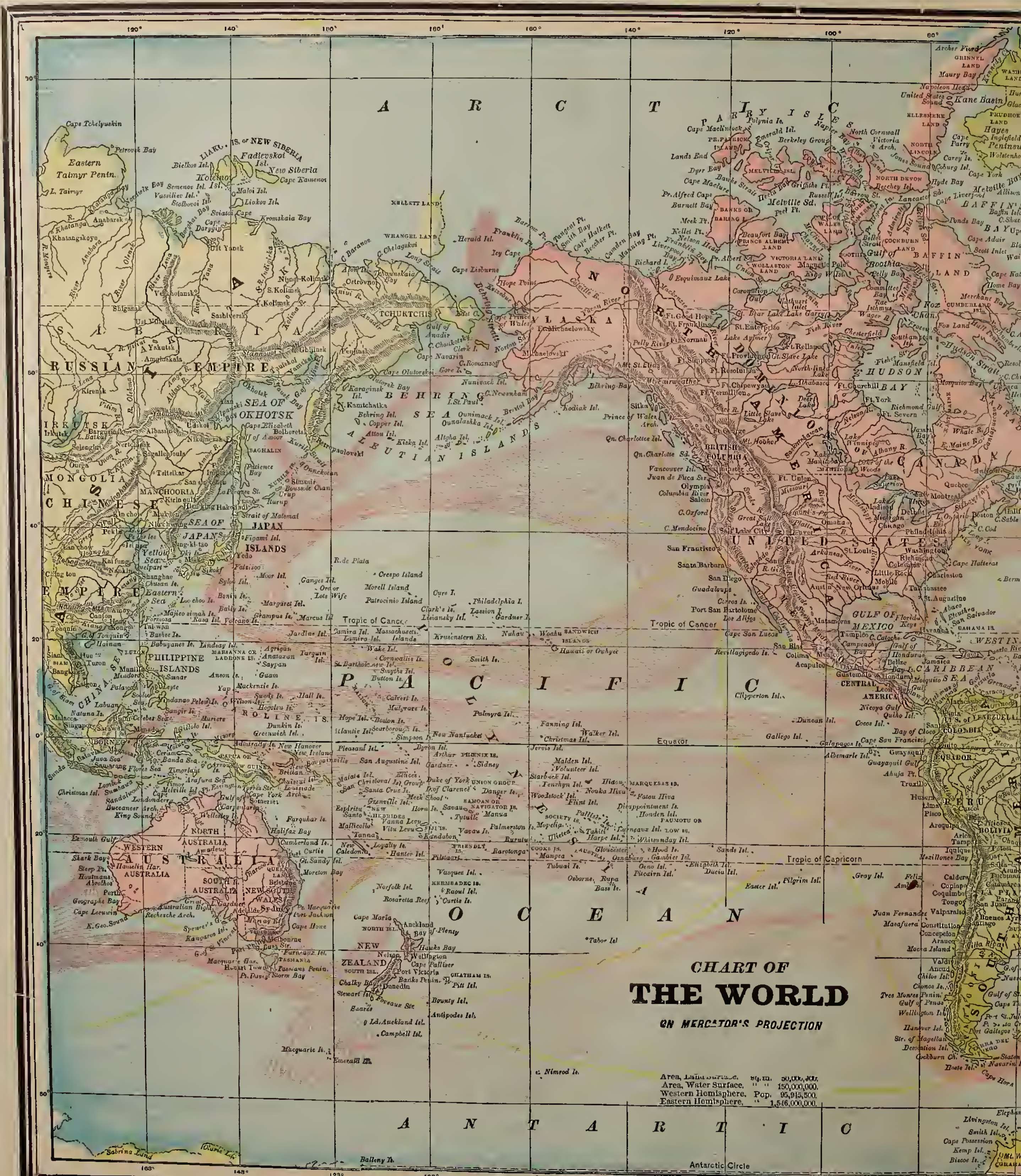
EASTERN HEMISPHERE

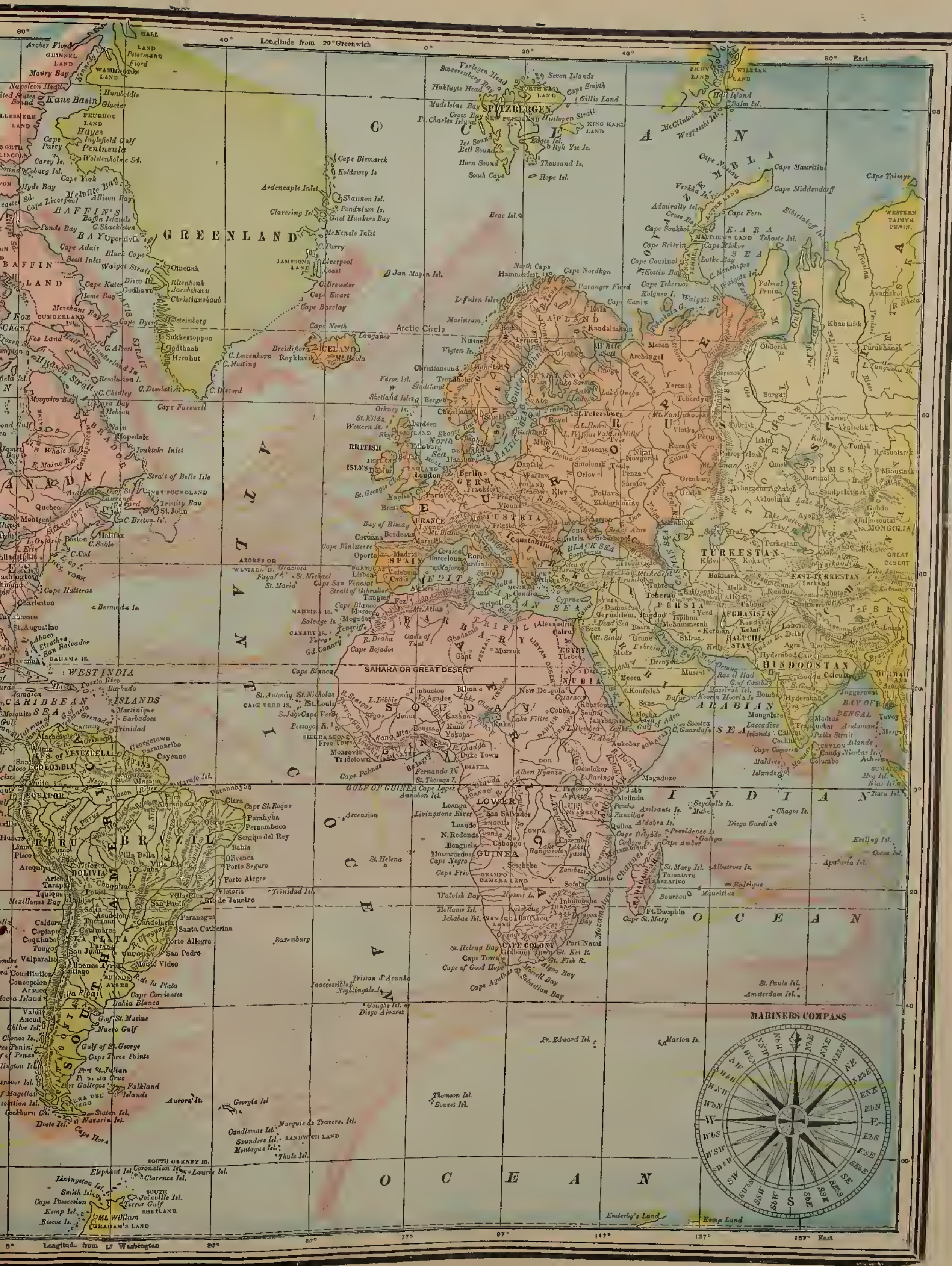

North Pole
South Pole
ARCTIC OCEAN
ANTARCTIC OCEAN
EUROPE
ASIA
AFRICA
AUSTRALIA
INDIAN OCEAN
ATLANTIC OCEAN
PACIFIC OCEAN
RUSSIAN EMPIRE
SIBERIA
CHINESE EMPIRE
TARTARY
TIBET
CHINA
ARABIA
SAHARA OR GREAT DESERT
SOUDAN
GUINEA
MADAGASCAR
PHILIPPINE ISLANDS
BORNEO
SUMATRA
NEW GUINEA
POLYNESIA
EQUATOR
TROPIC OF CANCER
TROPIC OF CAPRICORN
ARCTIC CIRCLE
ANTARCTIC CIRCLE
Longitude East from Greenwich
Mediterranean Sea
Black Sea
Caspian Sea
Bay of Bengal
China Sea
Sea of Japan
Yellow Sea
Sea of Okotsk
Cape of Good Hope
Cape Colony
Ceylon
Tasmania
Kerguelens Land
Enderby's Land
L. Albert Nyanza
L. Victoria Nyanza
L. Baikal
Nile R. 3,900
Yenisei R. 3,400
Yang-tse-Kiang R. 3,100
Niger 3,000
Congo or Livingston R. 2,800
Hoang Ho or Yellow R. 2,700
Obi R. 2,600
Amur or Amoor R. 2,150
Volga R. 2,300
Danube R. 1,860
Euphrates R. 1,800
Ganges R. 1,625
Zambezi R. 1,350
Dnieper R. 1,210
Rhine 875
Elbe 725
Tagus 550
Seine 455
Mediterranean Sea
Arctic Ocean
Yellow Sea
Atlantic Ocean
Atlantic Ocean
Gulf of Pechili
Arctic Ocean
Okhotsk Sea
Caspian Sea
Black Sea
Persian Gulf
Bay of Bengal
Indian Ocean
Black Sea
North Sea
North Sea
Atlantic Ocean
English Channel
Mt. Hercules 32,768
Mt. Everest 29,002
Kanchinjinga 28,156
Dwalagiri 26,826
Choomalari 23,944
Hindoo Coosh 20,232
Demavend 18,465
Mt. Ararat 16,916
Mt. Blanc 15,781
Mte. Rosa 15,217
Finsteraarhorn 14,033
Kinabalou 13,698
Mulhacem 11,660
Maladetta 11,168
Mt. Etna 10,840
Cathkin Pk. 10,357
Mt. Gulom 8,241
Ymesfield 8,544
Pedrotallagalla 8,320
Snehaetten 7,563
Mt. Dore 6,188
Oraefa Jokull 6,427
Toll-pos-is 5,510
Ben Nevis 4,405
Snowdon 3,590
Table Mt. 3,550
Lions Head 2,180
Mt. Remarkable 3,179
Mt. Kilimanjaro
Kenia
Level of the sea

Approximate Length in miles of the Principal Rivers of the Eastern Hemisphere

WESTERN HEMISPHERE


North Pole
South Pole
ASIA
GREENLAND
NORTH AMERICA
SOUTH AMERICA
NORTH PACIFIC OCEAN
SOUTH PACIFIC OCEAN
NORTH ATLANTIC OCEAN
SOUTH ATLANTIC OCEAN
ANTARCTIC OCEAN
TROPIC OF CANCER
EQUATOR
Longitude West from Greenwich
TROPIC OF CAPRICORN
ANTARCTIC CIRCLE
Gulf of Mexico
Caribbean Sea
Hudson's Bay
Strait of Magellan
Cape Horn
NEW ZEALAND
Sandwich Islands
Approximate Length in miles, of the Principal Rivers of the Western Hemisphere
Yellowstone R.
Missouri R.
Mississippi R.
Ohio
Amazon R.
Missouri R.
Mississippi R.
Missouri R. 2,625
Parana R. 2,450
La Plata
Mackenzie R. 2,350
St. Lawrence R. 2,125
Rio Grande del Norte 1,700
Rio Colorado 1,620
R. S. Francisco 1,550
Canadian R.
Arkansas R. 1,540
Orinoco R. 1,500
Columbia R. 1,360
Red R. of La. 1,050
Magdalena 925
Susquehanna R. 445
Potomac R. 410
Gulf of Mexico
Atlantic Ocean
Gulf of Mexico
Mississippi River
Atlantic Ocean
Arctic Ocean
Gulf of St. Lawrence
Gulf of Mexico
Gulf of California
Atlantic Ocean
Mississippi River
Atlantic Ocean
Pacific Ocean
Mississippi River
Caribbean Sea
Chesapeake Bay
Chesapeake Bay
Sorata 21,813
Sahama 22,015
Aconcagua 22,422
Chimborazo 21,423
Mercedario 22,304
Tupungato 20,269
Popocatepetl 19,628
Orizaba 17,372
Mt. Hooker 16,149
Mt. St. Elias 11,967
Mt. Whitney 14,898
Pikes Peak 14,147
Sierra Nevada
Mt. Cook
Mt. Erebus
Irazu 11,500
El Tina 10,300
Mt. La Selle 8,968
Pico de Tarquino 8,400
Congrehay Peak 8,010
Blue Mtn. 7,335
Mt. Mitchell 6,700
La Grande Soufriere 5,500
Mt. Pelee 4,429
El Yanque 3,700
Mt. Egmont 8,270
Mt. Humboldt 5,418
Mt. Buckland 4,000
Rotui 3,500
NORTH AMERICA
SOUTH AMERICA
SOUTH SEA OCEAN
Level of the sea

CHART OF
THE WORLD
ON MERCATOR'S PROJECTION
Area, Land Surface, Sq. m. 50,000,000.
Area, Water Surface, " " 150,000,000.
Western Hemisphere, Pop. 95,945,500.
Eastern Hemisphere, " 1,546,000,000.
A R C T I C
P A C I F I C
O C E A N
A N T A R C T I C
RUSSIAN EMPIRE
SIBERIA
MONGOLIA
CHINESE EMPIRE
JAPAN
PHILIPPINE ISLANDS
AUSTRALIA
NEW ZEALAND
ALASKA
NORTH AMERICA
DOMINION OF CANADA
UNITED STATES
MEXICO
SEA OF OKHOTSK
BEHRING SEA
ALEUTIAN ISLANDS
HUDSON BAY
BAFFIN LAND
GULF OF MEXICO
CARIBBEAN SEA
Tropic of Cancer
Equator
Tropic of Capricorn
Antarctic Circle


Longitude from 20° Greenwich
Longitude from Washington
GREENLAND
BAFFIN LAND
BAFFIN'S BAY
Kane Basin
Davis Strait
Hudson Strait
CANADA
LABRADOR
NEWFOUNDLAND
Quebec
Montreal
Boston
NEW YORK
Washington
Charleston
St. Augustine
Bermuda Is.
BAHAMA IS.
Havana
WEST INDIA ISLANDS
CARIBBEAN SEA
Jamaica
Porto Rico
Martinique
Barbadoes
Trinidad
VENEZUELA
COLOMBIA
Cayenne
ECUADOR
PERU
BOLIVIA
BRAZIL
Lima
Pernambuco
Bahia
Rio de Janeiro
Valparaiso
Montevideo
Buenos Ayres
LA PLATA
Falkland Islands
Cape Horn
Staten Isl.
SOUTH SHETLAND
SOUTH ORKNEY IS.
Georgia Isl.
Sandwich Land
Spitzbergen
Jan Mayen Isl.
ICELAND
Reykiavik
Mt. Hecla
Cape Farewell
Arctic Circle
ATLANTIC OCEAN
BRITISH ISLES
Dublin
London
Paris
FRANCE
SPAIN
Madrid
Lisbon
Strait of Gibraltar
AZORES OR WESTERN IS.
MADEIRA IS.
CANARY IS.
CAPE VERD IS.
MEDITERRANEAN SEA
Berlin
GERMANY
AUSTRIA
Vienna
Rome
Constantinople
BLACK SEA
EUROPE
RUSSIA
St. Petersburg
Moscow
LAPLAND
North Cape
NOVA ZEMBLA
KARA SEA
SIBERIA
TURKESTAN
PERSIA
Teheran
ARABIA
Mecca
AFGHANISTAN
BALUCHISTAN
HINDOOSTAN
Calcutta
Bombay
Madras
Ceylon
Maldives
Laccadive Islands
Bay of Bengal
ARABIAN SEA
MONGOLIA
EAST TURKESTAN
TIBET
BURMAH
Andaman Islands
Nicobar Is.
Tripoli
BARBARY
SAHARA OR GREAT DESERT
EGYPT
Cairo
Alexandria
NUBIA
SOUDAN
GUINEA
Gulf of Guinea
St. Helena
Ascension
Lower Guinea
Zanzibar
Madagascar
Mozambique Channel
Cape Colony
Cape Town
Cape of Good Hope
Tristan d'Acunha
Mauritius
Bourbon
Seychelles Is.
Chagos Is.
INDIAN OCEAN
St. Paul's Isl.
Amsterdam Isl.
Kerguelen Isl.
Pr. Edward Isl.
Marion Is.
Enderby's Land
Kemp Land
OCEAN
MARINERS COMPASS
N
NbE
NNE
NEbN
NE
NEbE
ENE
EbN
E
EbS
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SbE
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SWbS
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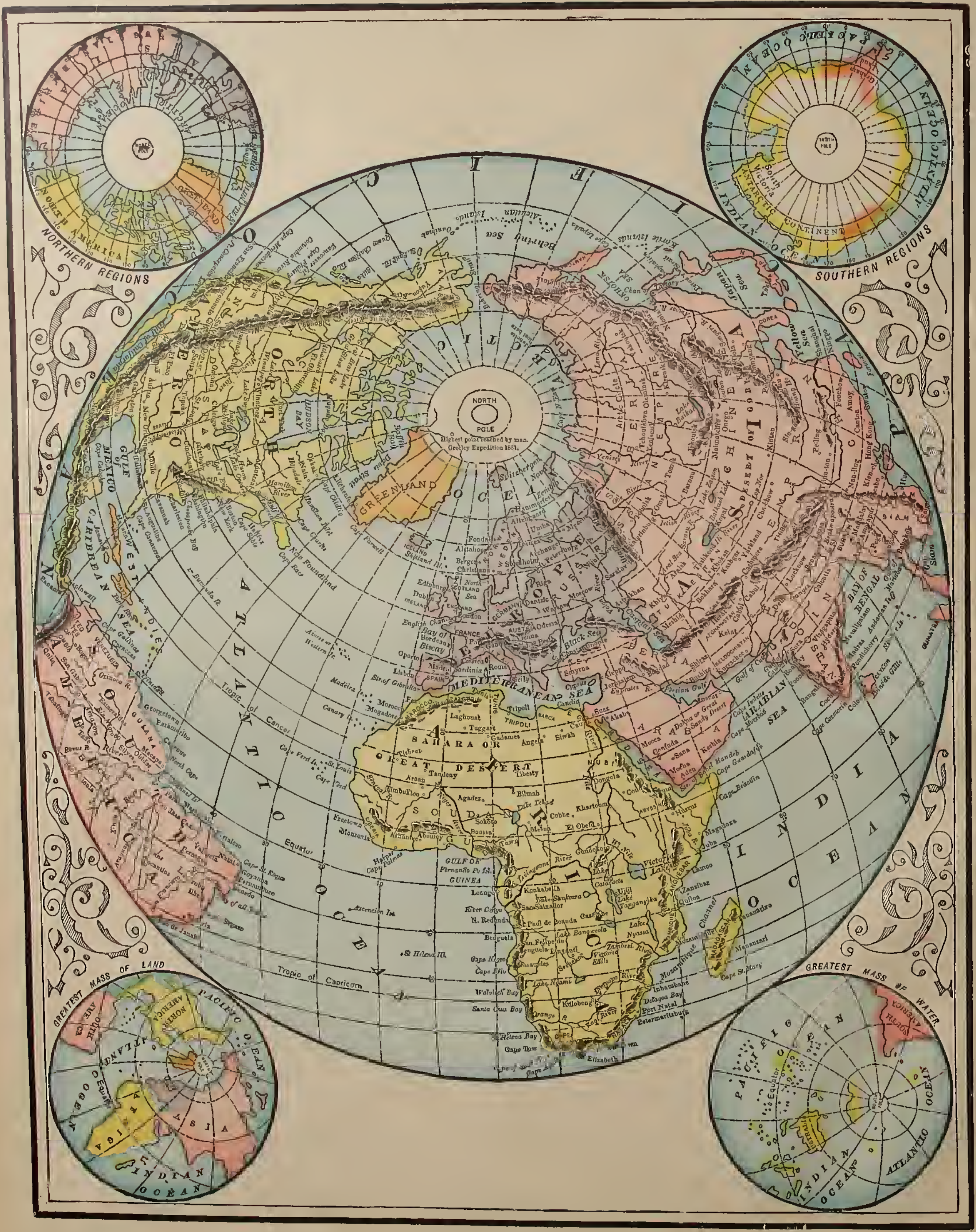
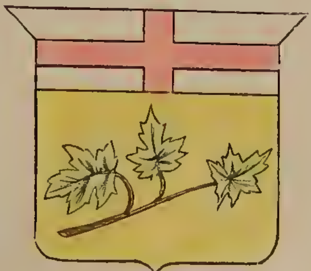
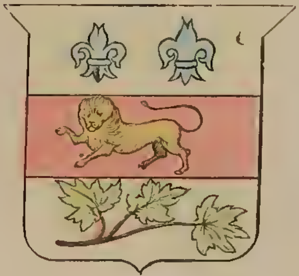
WbS
W
WbN
WNW
NWbW
NW
NWbN
NNW
NbW
80°
60°
40°
20°
0°
20°
40°
60°
80° East
77°
97°
117°
137°
157° East


NORTHERN REGIONS
SOUTHERN REGIONS
GREATEST MASS OF LAND
GREATEST MASS OF WATER
NORTH POLE
Highest point reached by man. Greeley Expedition 1881.
ARCTIC OCEAN
PACIFIC
NORTH AMERICA
SOUTH AMERICA
EUROPE
ASIA
AFRICA
GREENLAND
ATLANTIC OCEAN
INDIAN OCEAN
MEDITERRANEAN SEA
GULF OF MEXICO
CARIBBEAN SEA
HUDSON BAY
Behring Sea
Aleutian Islands
Kurile Islands
Japan
Sea of Okhotsk
Yellow Sea
Corea
CHINESE EMPIRE
SIBERIA
RUSSIA
Black Sea
Caspian Sea
Persian Gulf
ARABIA
ARABIAN SEA
BAY OF BENGAL
HINDOSTAN
SIAM
SAHARA OR GREAT DESERT
SOUDAN
GULF OF GUINEA
Madagascar
Mozambique Channel
Tropic of Cancer
Tropic of Capricorn
Equator
Cape Farewell
Iceland
New Foundland
Cape Race
WEST INDIES
Azores or Western Is.
Madeira
Canary Is.
Cape Verd Is.
Ascension Isl.
St Helena Isl.
Cape of Good Hope
ANTARCTIC CONTINENT
South Victoria
PACIFIC OCEAN
ATLANTIC OCEAN
INDIAN OCEAN
AUSTRALIA

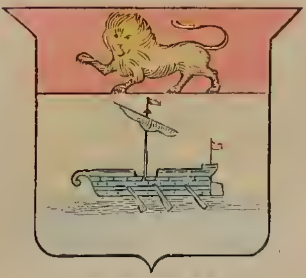
ARMS OF THE DOMINION AND OF THE PROVINCES OF CANADA.



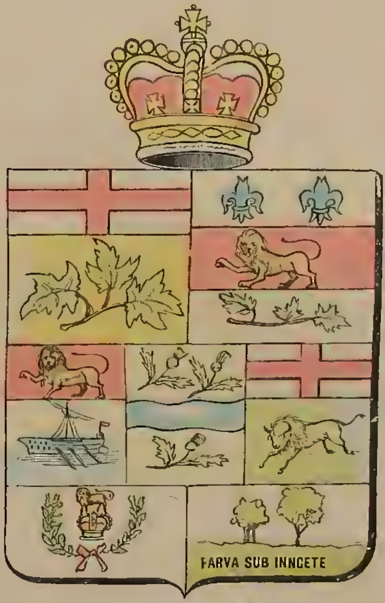
ONTARIO



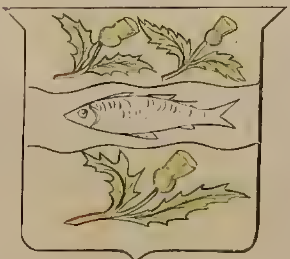
QUEBEC



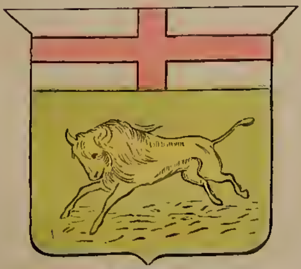
NEW BRUNSWICK


PARVA SUB INNGETE

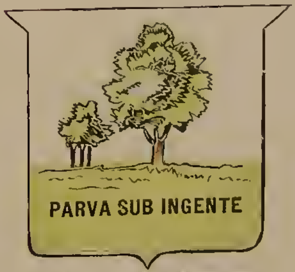
DOMINION OF CANADA



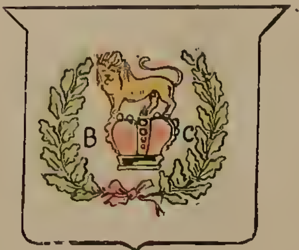
NOVA SCOTIA



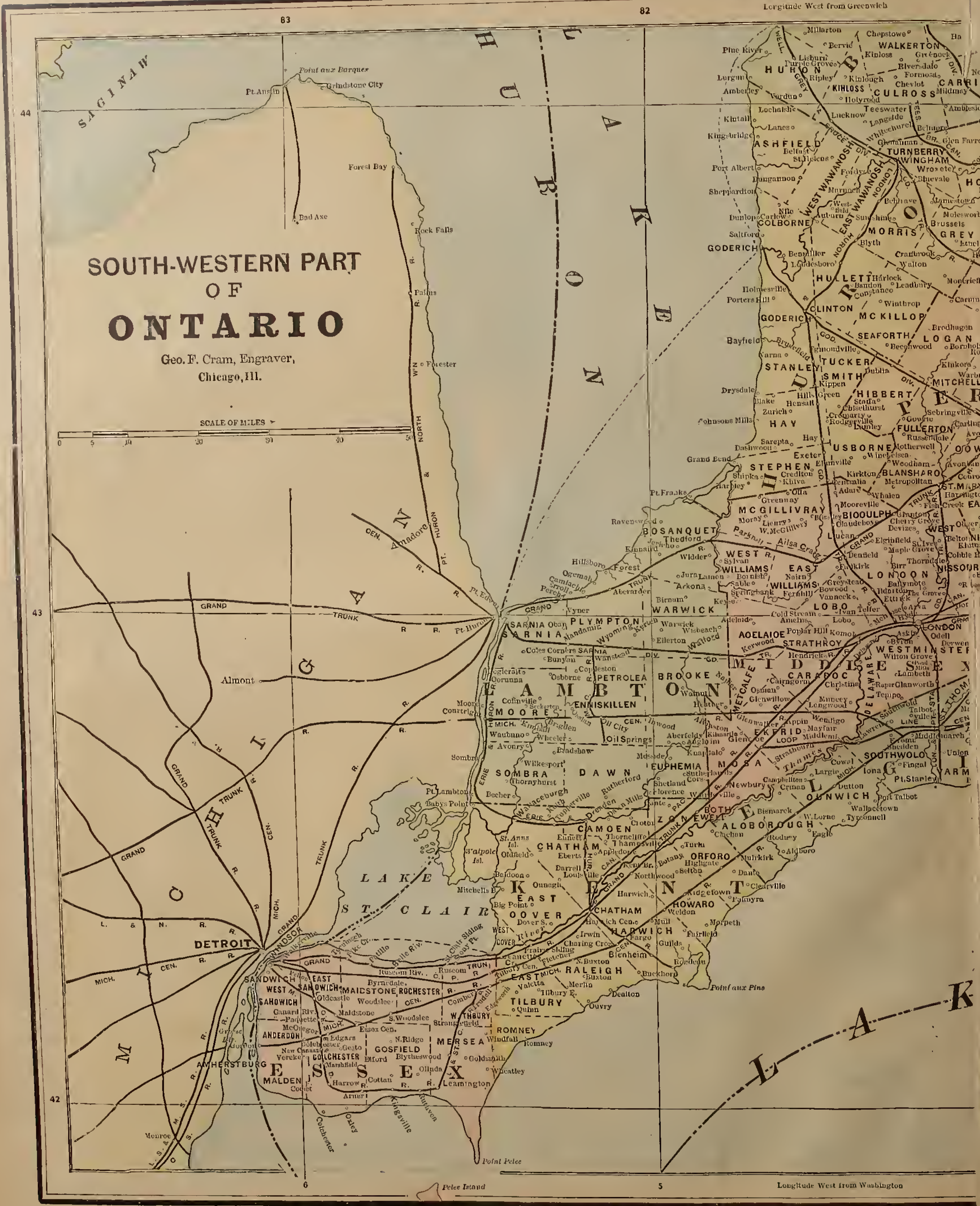
MANITOBA


PARVA SUB INGENTE

PRINCE EDWARD ISLAND



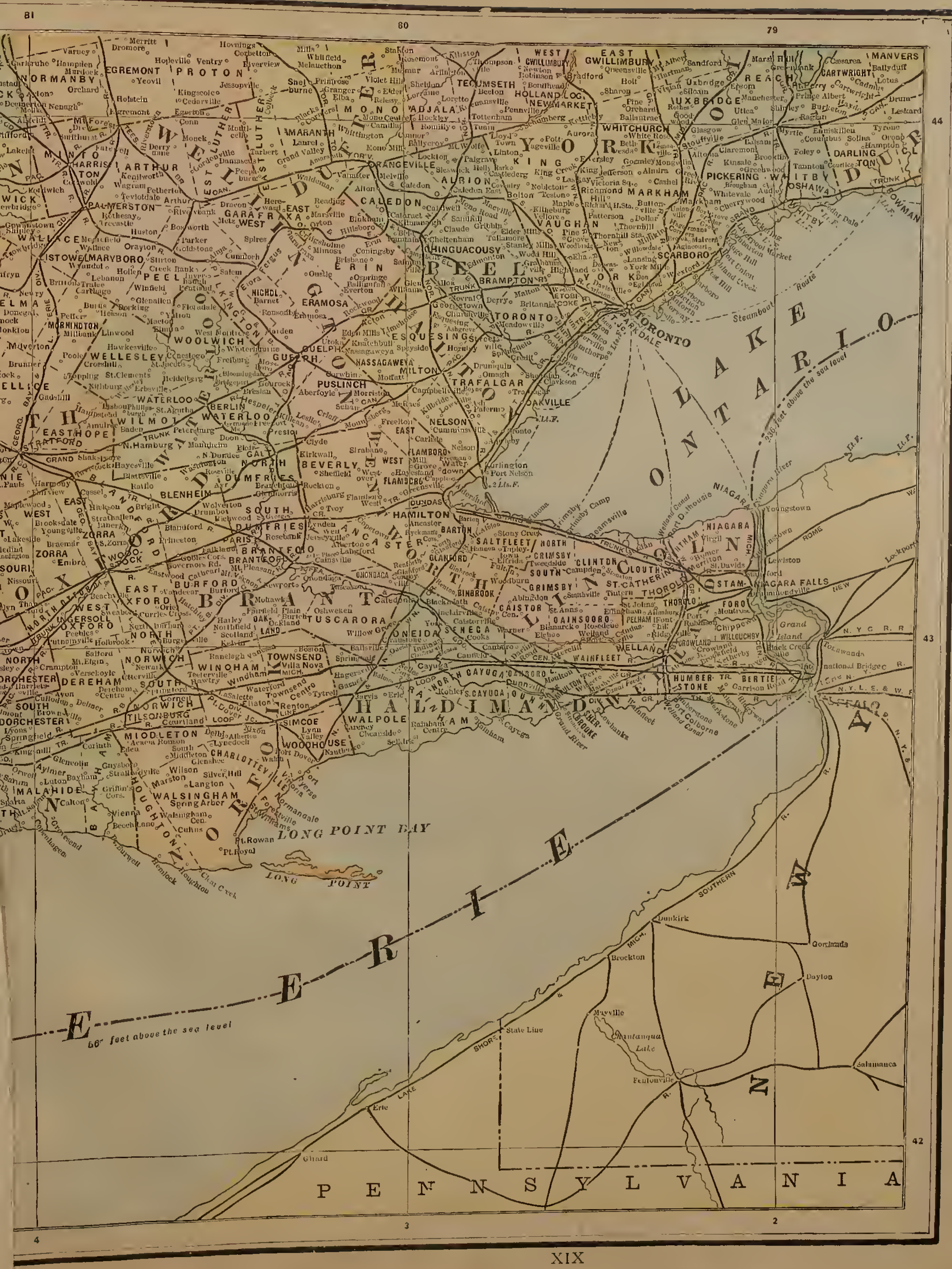
BRITISH COLUMBIA



SOUTH-WESTERN PART OF ONTARIO

Geo. F. Cram, Engraver,
Chicago, Ill.

SCALE OF MILES
0
5
10
20
30
40
50
Longitude West from Greenwich
Longitude West from Washington
83
82
44
43
42
6
5
SAGINAW
LAKE HURON
LAKE ST. CLAIR
LAKE
MICHIGAN
Point aux Barques
Grindstone City
Pt. Austin
Forest Bay
Bad Axe
Rock Falls
Palms
Forester
Almont
Pt. Huron
Pt. Edward
DETROIT
WINDSOR
Walkerville
SANDWICH
AMHERSTBURG
Monroe
Point Pelee
Pelee Island
Point aux Pins
HURON
BRUCE
PERTH
MIDDLESEX
LAMBTON
KENT
ESSEX
ELGIN
GODERICH
CLINTON
SEAFORTH
MITCHELL
EXETER
LONDON
STRATHROY
SARNIA
PETROLEA
CHATHAM
WALKERTON
WINGHAM
KINCARDINE
TURNBERRY
COLBORNE
ASHFIELD
STANLEY
HAY
USBORNE
STEPHEN
MCGILLIVRAY
BOSANQUET
WARWICK
PLYMPTON
MOORE
ENNISKILLEN
SOMBRA
DAWN
BROOKE
EUPHEMIA
ALDBOROUGH
ORFORD
HOWARD
HARWICH
RALEIGH
TILBURY EAST
ROMNEY
MERSEA
GOSFIELD
COLCHESTER
MALDEN
ANDERDON
MAIDSTONE
ROCHESTER
LEAMINGTON
KINGSVILLE
GRAND TRUNK R.R.
MICH. CEN. R.R.


81
80
79
44
43
42
4
3
2
LAKE ONTARIO
246 feet above the sea level
LAKE ERIE
565 feet above the sea level
LONG POINT BAY
LONG POINT
PENNSYLVANIA
NEW YORK
TORONTO
HAMILTON
NIAGARA
NIAGARA FALLS
BUFFALO
YORK
PEEL
HALTON
WELLINGTON
WATERLOO
WENTWORTH
LINCOLN
WELLAND
HALDIMAND
NORFOLK
BRANT
OXFORD
PERTH
DUFFERIN
SIMCOE
ONTARIO
DURHAM
GUELPH
BRANTFORD
GALT
BERLIN
WOODSTOCK
SIMCOE
ST. CATHERINES
OAKVILLE
BRAMPTON
MARKHAM
SCARBORO
WHITBY
OSHAWA
ORANGEVILLE
ARTHUR
PALMERSTON
LISTOWEL
STRATFORD
PARIS
INGERSOLL
TILSONBURG
DUNKIRK
Erie
Girard
Mayville
Chautauqua Lake
Salamanca
Brockton
Dayton
Gowanda
Lewiston
Youngstown
Lockport
Tonawanda
Grand Island
Fentonville
State Line
LAKE SHORE & MICH. SOUTHERN R.R.
N. Y. C. R. R.
N. Y. L. E. & W. R.R.
GRAND TRUNK R.
Steamboat Route

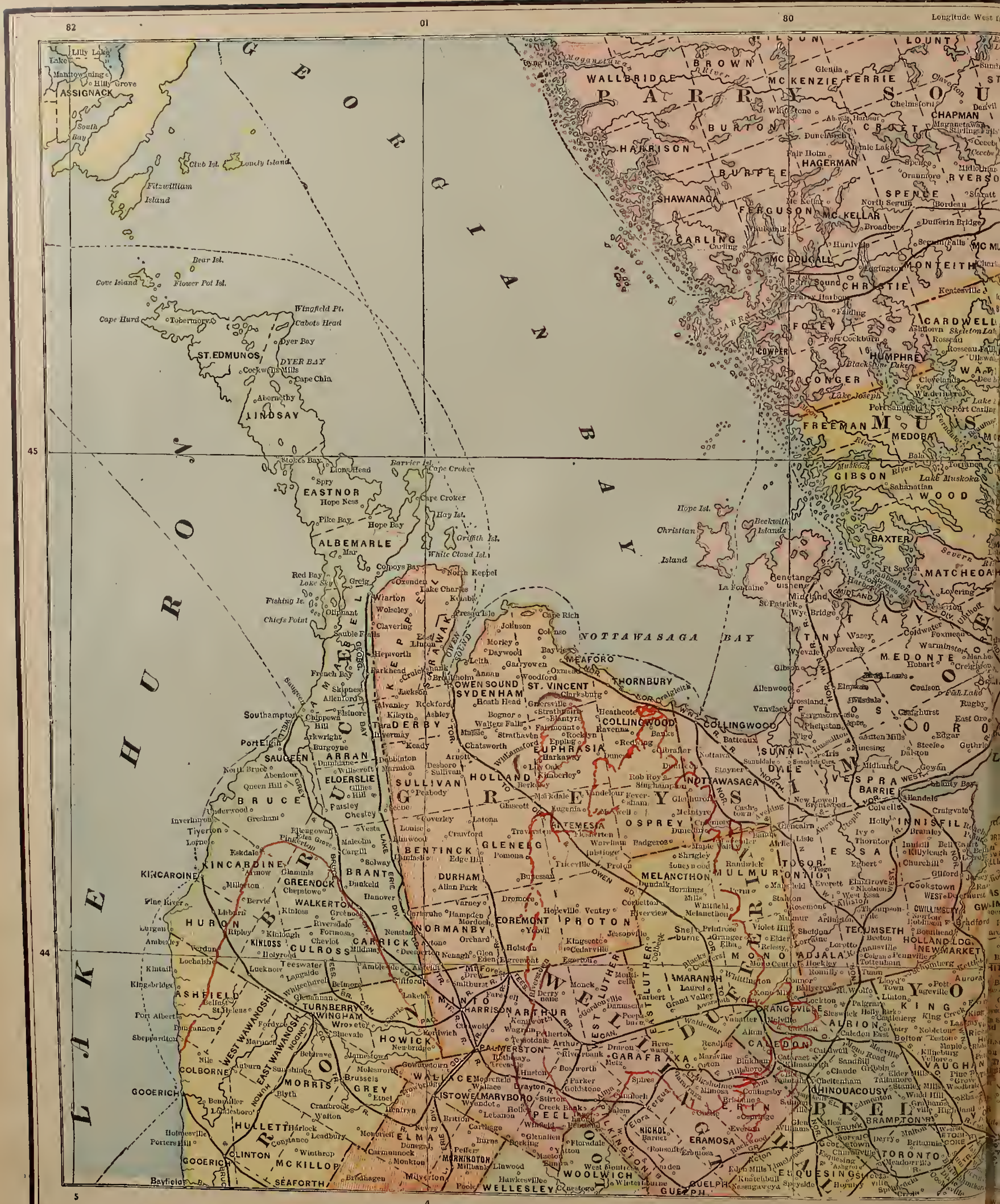
LIST OF POST OFFICES IN CANADA.

The Offices printed in Italics are authorized to grant and Pay Money Orders. The Offices Marked * are Savings Bank Offices. The capital letters on the right of the Electoral District column indicate the several Provinces of the Dominion, thus:—O., Ontario; Q., Quebec; N. S., Nova Scotia; N. B., New Brunswick; P. E. I., Prince Edward Island; M., Manitoba; B. C., British Columbia; Alta., Alberta; Assa., Assiniboia; Atha., Athabaska; Sask., Saskatchewan. Places whose population is not ascertainable are marked thus:—×

POST OFFICE.	ELECTORAL DISTRICT.	POP.	POST OFFICE.	ELECTORAL DISTRICT.	POP.	POST OFFICE.	ELECTORAL DISTRICT.	POP.	POST OFFICE.	ELECTORAL DISTRICT.	POP.
Abbott's Corners	Missisquoi Q	100	Anderson	Perth, S. R. O	×	Austin	Marquette M	×	Bass River	Kent N. B	300
Abbotsford	Rouville Q	300	Anderson	Westmoreland N. B	×	*Avening*	Simcoe, N. R. O	200	Basswood Ridge	Charlotte N. B	×
Abenaquis	Dorchester Q	×	Anderson's Corners	Huntingdon Q	×	Avery's Portage	York N. B	×	Basswood	Marquette M	×
Abenaquis Spring	Yamaska Q	×	*Andover*	Victoria N. B	400	Avignon	Bonaventure Q	1,000	Bateston	Cape Breton N. S	×
Aberarder	Lambton, W. R. O	×	Ange Gardien	Montmorency Q	1 050	Avoca	Argenteuil Q	×	* *Bath*	Lennox O	612
Abercorn	Brome Q	200	Ange G. de Rouville	Rouville Q	×	Avon	Middlesex, E. R. O	100	Bath	Carleton N. B	500
Abercrombie	Pictou N. S.	×	Angeline	Rouville Q	×	Avonbank	Perth, S. R. O	×	*Bathurst*	Gloucester N. B	600
Aberdeen	Grey, S. R. O	×	Angers	Ottawa Q	150	Avondale	Carleton N. B	150	*Bathurst Village*	Gloucester N. B	×
Aberdeen	Cariboo-Lillooet B. C	×	* *Angus*	Simcoe, S. R. O	375	Avondale	Pictou N. S	500	Batiscan	Champlain Q	500
Aberdour	Bruce, W. R. O	×	Annan	Grey, N. R. O	×	Avondale Station	Pictou N. S	×	Batoche	Saskatchewan	×
Aberfeldy	Lambton, E. R O	×	*Annapolis*	Annapolis N. S	2,340	Avonmore	Stormont O	100	Batteau	Simcoe, N. R. O	100
Aberfoyle	Wellington, S. R. O	150	Annesley	Pontiac Q	×	Avonport	King's N. S	100	Battery Hill	Pictou N. S	×
Abernethy	Assa	×	Annidale	Queen's N. B	×	Avonport Station	King's N. S	×	Battersea	Frontenac O	×
Abingdon	Wentworth, S. R. O	×	Ansonia	Algoma O	×	Avonroy	Bothwell O	×	Battle's Corners	Glengarry O	×
Abram's Village	Prince P. E. I	×	Anten Mills	Simcoe, N. R. O	×	Avonton	Perth, S. R. O	×	Battleford	Saskatchewan	300
Abougoggin Road	Westmoreland N. B	×	*Antigonishe*	Antigonishe N. S	1,500	Aweme	Marquette M	×	Baxter's Harbour	King's N. S	×
Aboyne	Wellington, C. R. O	×	Antig. Harbour	Antigonishe N. S	×	Axe Lake	Muskoka & P. S'd O	×	Bay du Vin	Northumberland N. B	300
Acadie	Kent N. B	100	Antig. Harb. South S.	Antigonishe N. S	×	Ayer's Flat	Stanstead Q	200	Bay du Vin Mills	Northumberland N. B	×
Acadia Mines	Colchester N. S	1,800	Antioch	Muskoka & P. S'd O	×	*Aylesford*	King's N. S	400	* *Bayfield*	Huron, S. R. O	1,113
Acadie Siding	Kent N. B	×	Antler	Assa	×	* *Aylmer (East)*	Ottawa Q	1,775	*Bayfield*	Westmoreland N. B	×
* *Acton*	Halton O	1 200	Antoinette	Argenteuil Q	×	* *Aylmer (West)*	Elgin, E. R O	2,000	*Bayfield*	Antigonishe N. S	250
* *Acton Vale*	Bagot Q	1,500	Antrim	Halifax N. S	×	Aylwin	Ottawa Q	×	Bay Fortune	King's P. E. I	×
Adamsville	Brome Q	250	Antrim	Lanark, N. R. O	×	* *Ayr*	Waterloo, S. R. O	1,400	Bayham	Elgin, E. R O	×
Adamsville	Kent N. B	×	*Apohaqui*	King's N. B	300	* *Ayton*	Grey, S. R. O	400	Bayside	Hastings, W. R. O	×
Adare	Middlesex, N. R. O	×	Appin	Middlesex, W. R. O	215	Babington	Queen's N. B	×	Bayside	Charlotte N. B	×
Adderley	Megantic Q	×	Appin	Antigonishe N. S	×	Baby's Point	Bothwell O	×	Bay St. Lawrence	Victoria N. S	419
Addington Forks	Antigonishe N. S	100	Appleby	Halton O	×	Baccaro	Shelburne N. S	×	*Baysville*	Ontario, N. R. O	100
Addison	Brockville O	150	Appledore	Bothwell O	×	Back Bay	Charlotte N. B	200	Bayswater	King's N. B	×
Adelaide	Middlesex, W. R. O	140	Apple Grove	Stanstead Q	×	Back Lands	Antigonishe N. S	×	Bay View	St. John N. B	×
Adelphi	Selkirk M	×	Apple Hill	Glengarry O	200	Back Meadows	Pictou N. S	×	Bayview	Queen's P. E. I	×
Admaston	Renfrew, S. R. O	×	Apple River	Cumberland N. S.	300	*Baddeck*	Victoria N. S	800	Bayview	Grey, E. R. O	×
Admiral Rock	Hants N. S	×	*Appleton*	Lanark, N. R. O	250	Baddeck Bay	Victoria N. S	×	*Beachburg*	Renfrew, N. R. O	225
Adolphustown	Lennox O	175	Apsley	Peterborough, E. R. O	×	Baddeck Bridge	Victoria N. S	×	Beach Point	King's P. E. I	×
Adstock	Beauce Q	×	Apto	Simcoe, N. R. O	150	Baddeck Riv. N. Br.	Victoria N. S	×	Beaconsfield	Oxford, S. R. O	×
Advocate Harbour	Cumberland N. S	600	Arcadia	Yarmouth N. S	500	Baddow	Victoria, N. R. O	×	Beaconsfield	Selkirk M	×
Afton	Antigonishe N. S	×	Archer	Dundas O	×	* *Baden*	Waterloo, S. R. O	750	Beaconsfield	Victoria N. B	×
Agincourt	York, E. R. O	×	*Archibald*	Selkirk M	×	Badjeros	Grey, E. R O	×	Beach Meadows	Queen's N. S	×
* *Agnes*	Beauce Q	×	Archibald Sett	Restigouche N. B	×	Bagot	Renfrew, S. R. O	×	* *Beachville*	Oxford, S. R. O	250
Ahmic Harbour	Muskoka & P. S'd O	×	Archville	Carleton O	×	Bagotville	Chicoutimi Q	×	Bealton	Norfolk, N. R. O	100
Ahmic Lake	Muskoka & P. S'd O	×	Ardagh	Muskoka & P. S'd O	×	Baie de la Trinite	Saguenay Q	×	* *Beamsville*	Lincoln O	700
Ailsa Craig	Middlesex, N. R. O	900	Arden	Addington O	800	Baie des Rochers	Charlevoix Q	×	Bear Brook	Russell O	209
Aird	Missisquoi Q	×	Arden Station	Marquette M	×	Baie St. Paul	Lisgar M	×	Bear Island	York N. B	×
Airlie	Simcoe, S. R. O	×	Ardness	Pictou N. S	×	*Baie Verte*	Westmoreland N. B	200	Bear Point	Shelburne N. S	×
Air Line Junction	Welland O	×	Ardoch	Addington O	×	Baie Verte Road	Westmoreland N. B	×	*Bear Riv. (W. Side)*	Digby N. S	1,460
Aitkin's Ferry	Kings P. E. I	×	Ardpatrick	Marquette M	×	Bailey's Brook	Pictou N. S	850	Bear River	King's P. E. I	×
Akerly	Queens N. B	×	Ardtrea	Simcoe, E. R. O	×	*Baillieboro'*	Peterboro', W. R. O	200	Benton's Mills	Queen's P. E. I	×
Alameda	Assa	×	Argyle	Victoria, N. R. O	×	Baillargeon	Levis Q	×	Beatrice	Muskoka & P. S'd O	×
Alberni	Vancouver B. C	200	Argyle	Carleton N. B	×	Baillie	Charlotte N. B	×	Beauce Junction	Beauce Q	×
Albany	Prince P. E. I	×	Argyle	Yarmouth N. S	1,330	Bainsville	Glengarry O	×	* *Beauharnois*	Beauharnois Q	1,450
Albert	Hastings, E. R. O	×	Argyle	Lisgar M	×	Bairdsville	Victoria N. B	×	Beaufort	Carleton N. B	×
Albert	Albert N. B.	250	Argyle Head	Yarmouth N. S	×	Baker Settlement	Lunenburg N. S	×	Beaulac	Montcalm Q	×
Albert Bridge	Cape Breton N. S	×	Argyle Shore	Queen's P. E. I	×	Bala	Simcoe, E. R. O	×	Beaulieu	Montmorency Q	×
Albert Mines	Albert N. B	800	Argyle Sound	Yarmouth N. S	×	Balcarres	Assa	×	Beauly	Antigonishe N. S	×
Alberton	Brant, N. R. O	100	*Arichat*	Richmond N. S	1,050	Balderson	Lanark, S. R. O	100	Beaumont	Bellechasse Q	200
Alberton	Prince P. E. I	700	Arkell	Wellington, S. R. O	110	Baldoon	Kent O	×	Beauport	Quebec Q	4,200
* *Albion*	Cardwell O	700	* *Arkona*	Lambton, E. R. O	800	Baldwin	York, N. R. O	×	Beaupre	Montmorency Q	×
Albuna	Essex, S. R. O	×	*Arkwright*	Bruce, N. R O	125	Baldwin's Mills	Stanstead Q	150	Beaumaris	Simcoe, E. R O	×
Albury	Prince Edward O	×	Arlington	Cardwell O	100	Baldwin's Road	King's P. E. I	×	Beaurivage	Lotbiniere Q	×
Alcester	Selkirk M	×	Armadale	York, E. R. O	×	Balfour	Prince Edward O	×	Beausejour	Lisgar M	×
Aldboro'	Elgin, W. R. O	×	Arisaig	Antigonishe N. S	150	Balgonie	Assa	×	Beauvoir	Vaudreuil Q	100
Aldergrove	N. Westminster B. C	150	Armadale	King's P. E. I	150	Ballantrae	Ontario, W. R. O	100	Beaver Bank	Halifax N. S	×
Alderney	Richmond N. S	×	Armagh	Bellechasse Q	300	Ballantyne's Station	Frontenac O	×	Beaver Brook	Albert N. B	×
Alder Point	Cape Breton N. S	×	Armand	Temiscouata Q	300	Ballinafad	Wellington, S. R. O	200	Beaver Brook	Colchester N. S	×
Alder River	Guysborough N. S	×	Arnow	Bruce, W. R. O	×	Ballinvilla	Carleton O	×	Beaver Cove	Cape Breton N. S	×
Aldershot	Wentworth, N. R. O	×	Armstein	Muskoka & P. S'd O	×	Ballycroy	Cardwell O	×	Beaver Creek	Marquette M	×
Aldouane	Kent N. B	×	Armstrong	King's N. B	×	Ballyduff	Durham, E. R. O	×	Beaver Dam	York N. B	×
Alert Bay	Cariboo B. C	×	*Armstrong's Brook*	Restigouche N. B	2,000	Ballymote	Middlesex, E. R. O	×	Beaver Harbour	Charlotte N. B	250
Alexander	Inverness N. S	×	Armstrong's Corner	Queen's N. B	×	Balmerino	Marquette M	×	Beaver Point	Vancouver B. C	×
Alexander's Point	Gloucester N. B	×	Armstrong Lake	Assa	×	Balmoral	Haldimand O	×	Beaver Rapids	Marquette M	×
Alexander Station	Selkirk M	×	Armstrong's Mills	Wellington, S. R. O	×	Balmoral	Restigouche N. B	×	Beaver River	Digby N. S	150
Alexandra	Queen's P. E. I	×	Arnaud	Provencher M	×	Balmoral	Lisgar M	×	Beaver River Corner	Digby N. S	×
Alexandria	Cariboo B. C	×	Arner	Essex O	×	Balmoral	Richmond N. S	×	* *Beaverton*	Ontario, N. R. O	900
* *Alexandria*	Glengarry O	1,400	Arnott	Grey, N. R. O	×	Balmoral Mills	Colchester N. S	×	* *Becancour*	Nicolet Q	600
Alexandrina	Kent N. B	×	* *Arnprior*	Renfrew, S. R. O	2,150	Balsam	Ontario, W. R. O	×	Becancour Station	Megantic Q	×
Alfred	Prescott O	150	Aroostook Junction	Victoria N. B	500	Balsam Grove	Victoria, N. R. O	×	Becher	Bothwell O	×
Algoma Mills	Algoma O	×	Aroostook Portage	Victoria N. B	×	Balsam Lake	Victoria, N. R. O	×	Beckstead	Dundas O	×
Algonquin	Grenville, S. R. O	100	Arrochar	Assa	×	Baltimore	Northumb. W. R. O	307	Bedeque	Prince P. E. I	300
Alison	Westmoreland N. B	×	Arrow River	Marquette M	×	Bamberg	Waterloo, N. R. O	180	*Bedford*	Missisquoi Q	1,200
Alkali Lake	Cariboo B. C	×	Arrowton	Marquette M	×	Banbury	Muskoka & P. S'd O	×	Bedford Basin	Halifax N. S	×
Allanburg	Welland O	200	* *Arthabaskaville*	Arthabaska Q	×	*Bancroft*	Hastings, N. R. O	×	Bedford Mills	Frontenac O	×
Allanburn	Marquette M	×	* *Arthur*	Wellington, N. R O	1,420	Banda	Simcoe, S. R. O	×	*Beebe Plain*	Stanstead Q	400
* *Allandale*	Simcoe, S. R. O	700	Arthurette	Victoria N. B	400	Bandon	Huron, S. R. O	×	Beech Grove	Pontiac Q	×
Allandale	York N. B	×	Arthurville	Bellechasse Q	×	Banff	Alta	×	Beach Hill	Albert N. B	×
Allan Park	Grey, S. R. O	115	Arundel	Argenteuil Q	×	Bangor	King's P. E. I	×	Beach Hill	King's N. S	×
Allan's Corners	Chateauguay Q	×	Arva	Middlesex, E. R. O	×	Banks	Grey, E. R. O	×	Beech Lane	Norfolk, S. R. O	×
Allan's Mills	Lanark, S. R. O	×	Asbestos	Richmond Q	×	Banks of Br'd Cove	Inverness N. S	×	Beechmount	Hastings, N. R. O	×
Allenford	Bruce, N. R. O	350	Ascot Corner	Sherbrooke Q	600	Bannockburn	Hastings, N. R. O	100	Beechmont	Cape Breton N. S	×
Allensville	Muskoka & P. L'd O	×	Asessippi	Marquette M	×	Barachois	Westmoreland N. B	×	Beech Ridge	Argenteuil Q	250
Allenwood	Simcoe, N. R. O	×	Ash	Halton O	×	Barachois de Malbaie	Gaspe Q	200	Beechwood	Huron, S. R O	×
Allisonville	Prince Edward O	200	Ashburn	Ontario, S. R. O	160	Barb	Prescott O	150	*Beeton*	Simcoe, S. R. O	600
* *Alliston*	Simcoe, S. R. O	1,800	Ashcroft	Yale B. C	×	Bardolph	Lennox O	×	Beggsboro'	Muskoka & P. S'd O	×
Alloa	Peel O	×	Ashcroft Station	Yale & Kootenay B. C	×	Bardsville	Simcoe, E. R. O	×	Belfast	Huron, W. R. O	×
Allsaw	Victoria, N. R. O	×	Ashdad	Renfrew, S. R. O	×	*Barkerville*	Cariboo B. C	225	Belfast	Queen's P. E. I	150
Allumette Island	Pontiac O	×	Ashdale	Antigonishe N. S	×	Bark Lake	Renfrew, S. R. O	×	Belford	York, E. R. O	100
Alma	Wellington, C. R. O	175	Ashtown	Muskoka & P. S'd O	×	Barkway	Ontario, N. R. O	×	Belfountain	Cardwell O	200
Alma	Albert N. B	500	Ashgrove	Halton O	×	Barnaby River	Northumberland N. B	×	Belgrave	Huron, E. R O	160
Alma	Pictou N. S	100	Ashland	Carleton N. B	×	Barnesville	King's N. B	150	Belhaven	York, N. R. O	×
Alma	Prince P. E. I	×	Ashley	Grey, N. R. O	×	Barnett	Wellington, C. R. O	×	Bell Anse	Gaspe Q	×
Almasippi	Selkirk M	×	Ashton	Carleton O	820	Barney Riv. Station	Pictou N. S	×	Belledune	Gloucester N. B	400
Almira	York, E. R. O	×	Askilton	Inverness N. S	×	Barney's River	Pictou N. S	400	Belledune River	Gloucester N. B	×
* *Almonte*	Lanark, N. R. O	2,685	Askin	Middlesex, S. R. O	×	Barnston	Stanstead Q	200	*Bell Ewart*	Simcoe, S. R. O	250
Alport	Simcoe, E. R. O	×	Aspdin	Muskoka & P. S'd O	×	Bar River	Algoma O	×	Belle Creek	Queen's P. E. I	×
Alsace	Muskoka & P. S'd O	×	Assiniboine	Marquette M	×	Barrett	Muskoka & P. S'd O	×	Bellefleur	Victoria N. B	×
Alsfeldt	Grey, S. R. O	×	Aston Station	Nicolet Q	×	Barrettsholme	Albert N. B	×	Belleisle	Annapolis N. S	×
Althorpe	Lanark, S. R. O	×	Atlin	Ontario, S. R. O	×	* *Barrie*	Simcoe, N. R. O	5,550	Belleisle	King's N. B	×
Alton	Cardwell O	600	Athelstan	Huntingdon Q	200	Barriefield	Frontenac O	357	Belleisle Bay	King's N. B	×
Alton	Colchester N. S	×	Atherley	Ontario, N. R. O	210	Barrie Island	Algoma O	×	Belleisle Creek	King's N. B	×
Altona	Ontario, W. R. O	107	Atherton	Norfolk, N. R O	×	Barrington	Huntingdon Q	×	Bellenden	Queen's N. B	×
Alvanley	Grey, N. R. O	×	Athlone	Cardwell O	×	*Barrington*	Shelburne N. S	1,800	*Belle River*	Essex, N. R. O	900
* *Alvinston*	Lambton, E. R. O	1,200	Athole	Glengarry O	150	Barrington Passage	Shelburne N. S	×	Belle Riviere	Two Mountains Q	×
Amaguadus Pond	Cape Breton N. S	×	*Athol*	Cumberland N. S	100	Barrio's Beach	Antigonishe N. S	×	Belle Vallee	St. John's Q	×
Amaranth Station	Wellington, N. R O	×	Attercliffe	Wentworth, S. R. O	150	Barry's Bay	Renfrew, N. R. O	150	Belleview	Selkirk M	×
Amberley	Huron, E. R. O	100	Attercliffe Station	Monck O	×	Barry's Corner	Lunenburg N. S	×	* *Belleville*	Hastings, W. R. O	9,914
Ameliasburg	Prince Edward O	250	Atwood	Perth, N. R. O	×	Barronsfield	Cumberland N. S	×	Belleville	Carleton N. B	×
Amherst	Cumberland N. S	3,600	Aubert Gallion	Beauce Q	×	Bar Settlement	Hants N. S	×	Belleville	Yarmouth N. S	×
* *Amherstburgh*	Essex, S. R. O	2,800	Aubigny	Provencher M	×	Barss' Corners	Lunenburg N. S	×	Belleville Station	Hastings, W. R. O	×
Amherst Point	Cumberland N. S	×	Aubrey	Chateauguay Q	×	Bartibog	Northumberland N. B	×	Belliveaux Cove	Digby N. S	×
Amiens	Middlesex, W. R. O	×	Auburn	Huron, S. R. O	×	Bartibog Bridge	Northumberland N. B	×	Belliveaux Village	Westmoreland N. B	×
Amigari	Welland O	×	Auburn	King's N. S	×	Bartlett Mills	Charlotte N. B	×	Bellevue	Victoria, S. R. O	×
Amqui	Rimouski Q	600	Audley	Ontario, W. R. O	×	Bartonville	Wentworth, S. R. O	152	Bell Mount	Pontiac Q	×
Amulree	Oxford, N. R. O	×	Aughrim	Lambton, E. R. O	×	Bas de l'Anse	Charlevoix Q	×	Bellrock	Addington O	150
Anagance	King's N. B	×	Augustine Cove	Prince P. E. I	180	Basin Depot	Dt. of Nipissing O	×	*Bell's Corners*	Carleton O	164
Anagance Ridge	King's N. B	×	Auguston	Grey, E. R. O	×	Basin River Inhab.	Richmond N. S	×	Belmina	Wolfe Q	×
Ancaster	Brant, N. R. O	500	Auld's Cove	Guysborough N. S	×	Bassin du Lievre	Ottawa Q	×	Belmont	Middlesex, S. R. O	600
Ancienne Lorette	Quebec Q	×	*Aultsville*	Stormont O	300	Basingstoke	Wentworth, S. R. O	×	Belmont	Colchester N. S	300
Ancienne Lorette	Quebec Q	×	* *Aurora*	York, N. R. O	1,800	*Bass River*	Colchester N. S	300	Belmore	Huron, E. R. O	200

LIST OF POST OFFICES IN CANADA.

POST OFFICE.	ELECTORAL DISTRICT.	POP.
Belœil Station	Vercheres Q	×
Belœil Village	Vercheres Q	×
Belton	Middlesex, E. R. O	×
* *Belwood*	Wellington, C. R. O	300
Belyea's Cove	Queen's N. B	×
Benacadie	Cape Breton N. S	×
Benbecula	Assa	×
Bendale	York, E. R. O	×
Benmiller	Huron, W. R. O	150
Bennett	Megantic Q	×
Bennies Corners	Lanark, N. R. O	150
Bennington	Oxford, N. R. O	×
Bensfort	Peterboro', W. R. O	×
Benton	Carleton N. B	200
Beresford	Gloucester N. B	×
Bergerville	Quebec Q	600
Berkeley	Grey, N. R. O	×
* *Berlin*	Waterloo, N. R. O	7,423
Berry Mill Station	Westmoreland N. B	500
Berryton	Albert N. B	×
Berryton	Leeds, S. R. O	×
Bersimis	Saguenay Q	700
Berthier (*en bas*)	Montmagny Q	1,300
* *Berthier* (*en haut*)	Berthier Q	2,150
Bervie	Bruce, W. R. O	200
Berwick	Stormont O	100
* *Berwick*	King's N. S	500
* *Bethany*	Durham, E. R. O	600
Bethel	Shefford Q	200
Bethel	Prince Edward O	×
Bethesda	Ontario, W. R. O	×
Beulah	Marquette M	×
Bewdley	Northumb. W. R. O	×
Bexley	Victoria, N. R. O	×
Bic	Rimouski Q	2,500
Bienville	Levis Q	300
Big Bank	Victoria N. S	×
Big Bar Creek	Cariboo B. C	×
Big Bras d'Or	Victoria N. S	×
Big Brook	Inverness N. S	×
Big Cove	Queen's N. B	×
Big Fork	Algoma O	×
Biggar Ridge	Carleton N. B	×
Big Harbour	Victoria N. S	×
Big Intervale (Mar.)	Victoria N. S	×
Big Island	Pictou N. S	×
Big Lake	Algoma O	×
Big Loraine	Cape Breton N. S	×
Big Marsh	King's P. E. I	×
Big Marsh	Antigonishe N. S	×
Big Point	Kent O	×
Big Pond	Cape Breton N. S	130
Big Port le Bear	Shelburne N. S	×
Big Ridge	Cape Breton N. S	×
Big Springs	Hastings, N. R. O	×
Big Tracadie	Antigonishe N. S	×
Billerica	Pontiac Q	×
Billings' Bridge	Russell O	200
Bill Town	King's N. S	100
Binbrook	Wentworth, S. R. O	150
Bingham Road	Monck O	×
Binkham	Wellington, S. R. O	×
Binscarth	Marquette M	×
Birch Ridge	Victoria N. B	×
Birchton	Compton Q	×
Bird's Hill	Lisgar M	×
Birchtown	Shelburne N. S	×
Bird's Creek	Hastings, N. R. O	×
Birdton	York N. B	×
Birdsalls	Peterboro', E. R. O	×
Birmingham	Frontenac O	100
Birnam	Lambton, E. R. O	×
Birr	Middlesex, E. R. O	×
Birtle	Marquette M	500
Biscotasing	Algoma O	×
Bishop's Mills	Grenville, N. R. O	150
Bishop's Crossing	Wolfe Q	×
Bismarck	Monck O	×
Bissett Creek	Renfrew, N. R. O	×
Black Bank	Simcoe, S. R. O	×
Black Brook	Northumberland N. B	800
Black Brook	Cape Breton N. S	×
Blackburn	Russell O	×
Black Cape	Bonaventure Q	×
Black Creek	Welland O	100
Black's Corners	Wellington, N. R. O	×
Black Heath	Wentworth, S. R. O	×
Black Land	Restigouche N. B	×
Black Point	Restigouche N. B	150
Black Point	Halifax N. S	×
Black Point	Queen's N. S	×
Black River	Northumberland N. B	×
Black River	St. John N. B	200
Black River	Antigonishe N. S	×
Black River Bridge	Prince Edward O	×
Black River Bridge	Northumberland N. B	×
Black Rock	Cumberland N. S	×
Black Rock	Gloucester N. B	×
Black Rock	Victoria N. B	×
Black's Harbour	Charlotte N. S	×
Blackville	Northumberland N. B	450
Blair	Waterloo, S. R. O	175
Blair Athol	Restigouche N. B	×
Blairhampton	Victoria, N. R. O	×
Blairton	Peterboro' E. R. O	250
Blake	Huron, S. R. O	100
Blake	Marquette M	×
Blakeney	Lanark, N. R. O	100
Blanchard Road	Pictou N. S	×
Blanchard Settlement	Gloucester N. B	×
Blanche	Ottawa Q	×
Blanche	Shelburne N. S	×
Blanchet	Levis Q	×
Blandford	Arthabaska Q	×
Blandford	Lunenburg N. S	×
Blandford Station	Oxford, N. R. O	×
Blantyre	Grey, E. R. O	×
Blayney Ridge	York N. B	×
* *Blenheim*	Kent O	2,000
Blessington	Hastings, E. R. O	×
Blind River	Algoma O	150
Blissfield	Northumberland N. B	250
Blissville	Sunbury N. B	300
Block House	Lunenburg N. S	200
Blomidon	King's N. S	×
Bloomfield	Prince Edward O	×
Bloomfield	Prince P. E. I	×
Bloomfield	Carleton N. B	400
Bloomfield	King's N. B	200
Bloomfield	Digby N. S	×
Bloomfield Ridge	York N. B	×
Bloomfield Station	King's N. B	×
Bloomfield Station	Prince P. E. I	×
Bloomingdale	Waterloo, N. R. O	120
Blooming Point	Queen's P. E. I	×
Bloomington	Ontario, W. R. O	×
Bloomsburg	Norfolk, N. R. O	200
Blueberry	Queen's N. S	×
Blue Cove	Gloucester N. B	×
Blue Mountain	Pictou N. S	350
Blue's Mill	Inverness N. S	×
Blue Rock	Lunenburg N. S	×
Bluevale	Huron, E. R. O	300
Blumenort	Selkirk M	×
Blythe	Huron, E. R. O	1,100
Blythfield	Lisgar M	×
Blytheswood	Essex, S. R. O	×
Boakview	Assa	×
* *Bobcaygeon*	Victoria, S. R. O	800
Bocabec	Charlotte N. B	210
Bogart	Hastings, E. R. O	×
Bognor	Grey, N. R. O	×
Boiestown	Northumberland N. B	250
Boileau	Ottawa Q	×
Boisdale Barachois	Cape Breton N. S	150
Boisdale Chapel	Cape Breton N. S	×
Bois de Filion	Terrebonne Q	×
Bolduc	Beauce Q	×
Bolingbroke	Lanark, S. R. O	×
Bolsover	Victoria, N. R. O	200
Bolton Centre	Brome Q	300
Bolton Forest	Brome Q	×
Bolton Glen	Brome Q	×
Bomanton	Northumb, W. R. O	×
Bonaventure Island	Gaspe Q	×
Bonaventure River	Bonaventure Q	×
Bon Desir	Saguenay Q	×
* *Bondhead*	York, N. R. O	150
Bongard's Corners	Prince Edward O	×
Bonnechere	Renfrew, S. R. O	×
Bonne Esperance	Saguenay Q	×
Bonney River Station	Charlotte N. B	200
Bonshaw	Queen's P. E. I	×
Bookton	Norfolk, N. R. O	×
Boom	Inverness N. S	×
Booth	Pontiac Q	×
Bord à Plouffe	Laval Q	400
Bordeaux	Hochelaga Q	×
Bornholm	Perth, N. R. O	×
Bornish	Middlesex, N. R. O	×
Borromee	Russell O	×
Boscobel	Shefford Q	×
Boscurvis	Assa	×
Boskung	Victoria, N. R. O	×
Boston	Norfolk, N. R. O	200
Borneish	Inverness N. S	×
Boston Bar	Yale and Kootenay B. C	200
Boston Mills	Peel O	200
Bosworth	Wellington, C. R. O	×
Botany	Elgin, W. R. O	×
* *Bothwell*	Bothwell O	1,100
Bothwell	King's P. E. I	100
Botreaux	Chateauguay Q	×
Botsford Portage	Westmoreland N. B	×
Boucherville	Chambly Q	800
Bouchette	Ottawa Q	750
Bouck's Hill	Dundas O	×
Boudreau Village	Westmoreland N. B	×
Bougie	Jacques-Cartier Q	×
Boulogne	Drummond Q	×
Bourdeau	Muskoka O	×
Boularderie	Victoria N. S	150
Boularderie B. Lands	Cape Breton N. S	×
Boularderie Centre	Victoria N. S	×
Boularderie East	Victoria N. S	×
Boularderie West	Cape Breton N. S	×
Boulter	Hastings, N. R. O	×
Boundary Creek	Westmoreland N. B	×
Boundary, Presqu'Ile	Carleton N. B	×
Bourgeois	Kent N. B	×
Bourg Louis	Portneuf Q	×
Bowesville	Russell O	×
Bowling Green	Wellington, N. R. O	×
* *Bowmanville*	Durham, W. R. O	3,500
Box Grove	York, E. R. O	×
Boylston	Guysboro' N. S	500
Boyne	Halton O	150
Boynton	Stanstead Q	×
* *Bracebridge*	Ontario, N. R. O	1,500
Brackenrig	Muskoka & P. S'd O	×
Brackley Point	Queen's P. E. I	×
Brackley Point Road	Queen's P. E. I	×
Bracondale	York, W. R. O	×
* *Bradford*	York, N. R. O	1,300
Bradley	Bruce, E. R. O	×
Bradshaw	Bothwell O	×
Bradwardine	Selkirk M	×
Brae	Prince P. E. I	800
Brae Lake	Muskoka & P. S'd O	×
Braemar	Oxford, N. R. O	×
Braeside	Renfrew, S. R. O	275
Bramley	Simcoe, S. R. O	×
* *Brampton*	Peel O	3,000
Branch La Have	Lunenburg N. S	×
Branchton	Waterloo, S. R. O	250
Brandon	Selkirk M	2,500
Brandon Hills	Selkirk M	×
Brandy Creek	Norfolk, N. R. O	×
Bransfield	Northumberland N. B	×
* *Brantford*	Brant, S. R. O	12,753
Bray's Crossing	Russell O	×
Brazil Lake	Yarmouth N. S	×
Breadalbane	Glengarry O	×
Breadalbane	Restigouche N. B	×
Brechin	Ontario, N. R. O	150
Brenton	Yarmouth N. S	×
Brentwood	Simcoe, N. R. O	×
Breslau	Waterloo, N. R. O	×
Brewer's Mills	Frontenac O	×
Brewster	Middlesex, N. R. O	×
Brickley	Northumberland, E. R. O	×
Bridge Creek	Marquette M	×
Bridgedale	Albert N. B	×
Bridge End	Glengarry O	800
Bridgenorth	Peterboro', W. R. O	200
Bridgeport	Waterloo, N. R. O	150
Bridgeport	Cape Breton N. S	800
Bridgeport Mines	Cape Breton N. S	×
* *Bridgetown*	Annapolis N. S	800
Bridgeville	Pictou N. S	×
* *Bridgewater*	Hastings, N. R. O	600
Bridgewater	Lunenburg N. S	1,000
Brierwood	Selkirk M	×
Brigden	Lambton O	500
Brigg's Corner	Queen's N. B	×
Brigham	Brome Q	×
* *Bright*	Oxford, N. R. O	450
* *Brighton*	Northumberland, E. R. O	1,500
Brightside	Lanark, N. R. O	×
Briley's Brook	Antigonishe N. S	×
Brinsley	Middlesex, N. R. O	×
Brinston's Corners	Dundas O	×
Brisbane	Wellington, S. R. O	100
Bristol	Carleton N. B	200
Bristol	Pontiac Q	120
Britannia	Peel O	×
Britannia Mills	Bagot Q	×
Briton	Perth, N. R. O	×
Britonville	Argenteuil Q	×
Broadbent	Muskoka & P. S'd O	×
Broad Cove Chapel	Inverness N. S	×
Broad Cove (Lunen)	Lunenburg N. S	×
Broad Cove Mines	Inverness N. S	500
Broad Cove Ponds	Inverness N. S	×
Broadlands	Bonaventure Q	×
Broadview	Assa	×
Brockton	York, W. R. O	×
* *Brockville*	Brockville O	8,79[illegible]
Brodhagen	Perth, N. R. O	×
Brodie	Glengarry O	×
Brome	Brome Q	200
Brompton	Richmond Q	×
Brompton Falls	Richmond Q	×
Bronson	Hastings, N. R. O	×
* *Bronte*	Halton O	800
Brookburn	Annapolis N. S	×
Brookbury	Compton Q	100
Brooke	Lanark, S. R. O	×
Brookdale	Ottawa Q	×
Brookdale	Marquette M	×
Brookfield	Colchester N. S	150
Brookfield	Queen's N. S	660
Brookfield Station	Welland O	×
Brookholm	Grey, N. R. O	×
Brookland	Pictou N. S	×
* *Brooklin*	Ontario, S. R. O	850
Brooklyn	King's P. E. I	×
Brooklyn	Queen's N. S	800
Brooklyn	Yarmouth N. S	×
Brooksdale	Oxford, N. R. O	×
Brookvale	Queen's N. B	×
Brookvale	Halifax N. S	×
Brook Village	Inverness N. S	×
Brookville	Cumberland N. S	×
Brookville	Pictou N. S	×
Brookville	Carleton N. B	×
Brotherston	Wellington, N. R. O	×
Brougham	Ontario, W. R. O	250
Broughton	Beauce Q	×
Broughton Station	Beauce Q	×
Brouseville	Grenville, S. R. O	×
Brown Hill	York, N. R. O	×
Brown's Brook	Cumberland N. S	100
Brownsburg	Argenteuil Q	250
Brown's Creek	King's P. E. I	×
Brown's Mountain	Antigonishe N. S	×
Brownsville	Norfolk, N. R. O	800
Brownsville	Pictou N. S	×
Brownsville	King's N. B	×
Brucefield	Huron, S. R. O	200
Bruce Mines	Algoma O	575
Brudenell	Renfrew, S. R. O	100
Brule	Colchester N. S	400
Brunner	Perth, N. R. O	×
Brunswick	Durham, E. R. O	×
* *Brussels*	Huron, E. R. O	1,400
Bryanston	Middlesex, E. R. O	200
Brereton	Northumberland N. B	×
* *Bryson*	Pontiac Q	400
* *Buckingham*	Ottawa Q	1,300
Buckland	Bellechasse Q	350
Bucklaw	Victoria N. S	×
Buckley's	King's N. S	100
* *Buctouche*	Kent N. B	500
Bulger	Renfrew, N. R. O	×
Bull Moose Hill	King's N. B	×
Bullock's Corners	Wentworth, N. R. O	150
Bulwer	Compton Q	×
Bumfrau	Carleton N. B	100
Bunessan	Grey, S. R. O	×
Bunyan	Lambton, W. R. O	×
Burden	York N. B	×
* *Burford*	Brant, S. R. O	700
Burgessville	Oxford, S. R. O	300
Burgoyne	Bruce, N. R. O	×
Burgoyne Bay	Vancouver B. C	×
Burketon Station	Durham O	×
Burk's Falls	Muskoka & P. S'd O	×
Burleigh	Peterboro', E. R. O	×
Burleigh Falls	Peterboro', E. R. O	×
* *Burlington*	Halton O	1,100
Burlington	Prince P. E. I	150
Burlington	King's N. S	852
Burlington Beach	Wentworth, S. R. O	×
Burnaby	Monck O	×
Burnbrae	Northumb., E. R. O	×
Burnhamthorpe	Peel O	150
Burnley	Northumb., W. R. O	×
Burns	Perth, N. R. O	×
Burnside	Marquette M	×
Burnside	Two Mountains Q	×
Burnside	Pictou N. S	×
Burnstown	Renfrew, S. R. O	100
Burnsville	Gloucester N. B	×
Burnt Church	Northumberland N. B	×
Burntcoat	Hants N. S	×
Burnt River	Victoria, N. R. O	×
Burrard Inlet	N. Westminster B. C	×
Burritt's Rapids	Grenville, N. R. O	250
Burtch	Brant, S. R. O	×
Burton	Durham, E. R. O	×
Burton	Sunbury N. B	×
Burton	Prince P. E. I	×
Bury's Green	Victoria, N. R. O	×
Bushfield	Huron, E. R. O	×
Bush Glen	Stormont O	×
Bute	Megantic Q	×
Butterfield	Selkirk M	×
Butternut Ridge	King's N. B	500
Buttonville	York, E. R. O	×
Buxton	Kent O	125
Byng	Monck O	200
Byng Inlet	Muskoka & P. S'd O	×
Byng Inlet North	Muskoka & P. S'd O	100
Byrnedale	Essex, N. R. O	×
Byrne's Road	King's P. E. I	×
Byron	Middlesex, S. R. O	×
Cable Head	King's P. E. I	×
Cache Creek	Yale B. C	×
Cacouna	Temiscouata Q	1,400
Cadmus	Durham, W. R. O	×
Cadurcis	Marquette M	×
Caesarea	Durham, W. R. O	200
Cain's River	Northumberland N. B	×
Cainsville	Brant, N. R. O	800
Caintown	Leeds, S. R. O	200
Cairngorm	Middlesex, W. R. O	×
Cairnside	Chateauguay Q	×
Caistor Centre	Wentworth, S. R. O	×
Caistorville	Wentworth, S. R. O	100
Calabogie	Renfrew, S. R. O	×
Calder	Middlesex, S. R. O	×
Calderwood	Grey, S. R. O	×
Caldwell	Cardwell O	×
Caldwell	Pontiac Q	×
Caldwell's Mills	Lanark, N. R. O	150
Caledon	Cardwell O	235
Caledon East	Cardwell O	400
Caledonia	Haldimand O	[illegible]
Caledonia	Queen's P. E. I	200
Caledonia Corner	Queen's N. S	400
Caledonia Mills	Antigonishe N. S	×
Caledonia Mines	Cape Breton N. S	×
Caledonia, St. Mary's	Guysboro' N. S	×
Caledonia Settlement	Albert N. B	×
Caledonia Springs	Prescott O	725
Calgary	Alta	1,200
California	Victoria N. B	×
Calf Mountain	Marquette M	×
Calhoun	Westmoreland N. B	200
Callender	Muskoka & P. S'd O	150
Calton	Elgin, E. R. O	×
Calumet Island	Pontiac Q	1,500
Camborne	Northumb'd. W. R. O	×
* *Cambray*	Victoria, N. R. O	150
Cambria	Argenteuil Q	×
Cambridge	Queen's N. B	200
Cambridge	Hants N. S	200
Cambridge Station	King's N. S	×
Camden, East	Addington O	600
Cameron	Victoria, N. R. O	×
Cameron's Mills	Kent N. B	×
Camerontown	Glengarry O	×
Camilla	Cardwell O	×
Camille	Marquette M	×
Camlachie	Lambton, W. R. O	100
Campbellcroft	Durham, E. R. O	150
* *Campbellford*	Northumb., E. R. O	1,960
Campbell's Cross	Peel O	150
Campbell Settlement	King's N. B	×
Campbell Settlement	York N. B	×
Campbellton	Elgin, W. R. O	×
* *Campbellton*	Restigouche N. B	1,400
Campbellville	Halton O	200
Campbellville	Selkirk M	×
Campden	Lincoln O	150
Campo Bello	Charlotte N. B	1,400
Canaan	Russell O	110
Canaan	Yarmouth N. S	×
Canaan	King's N. S	×
Canaan Rapids	Queen's N. B	×
Canaan Station	Westmoreland N. B	×
Canada Creek	King's N. S	150
Canard	King's N. S	309
Canard River	Essex, N. R. O	×
Canboro'	Monck O	×
Candasville	Monck O	100
Canfield	Haldimand O	200
Canmore	Alta	×
Cannamore	Stormont O	340
Cannes	Richmond N. S	×
Cannifton	Hastings, E. R. O	600
Canning	Brant, N. R. O	107
* *Canning*	King's N. S	608
* *Cannington*	Ontario, N. R. O	1,200
Canobie	Gloucester N. B	×
Canoe Lake	Cape Breton N. S	×
Cannonville	Cumberland N. S	×
* *Canso*	Guysboro' N. S	1,600
Canterbury	Compton Q	150
Canterbury	York N. B	150
Canterbury Station	York N. B	×
Cantley	Ottawa Q	×
Canton	Durham, E. R. O	110
Cap à l' Aigle	Charlevoix Q	×
Cap Chat	Gaspe Q	930
Cap des Rosiers	Gaspe Q	×
Cape Bald	Westmoreland N. B	×
Cape Cove	Gaspe Q	600
Cape Chin	Bruce, N. R. O	×
Cape Croker	Bruce, N. R. O	×
Cap de Moselle Creek	Albert N. B	×
Cape Egmont	Prince P. E. I	×
Cape George	Antigonishe N. S	×
Cape George Harbor	Richmond N. S	204
Cape John	Pictou N. S	×
* *Capelton*	Sherbrooke Q	1,000
Cape Mabou	Inverness N. S	×
Cape North	Victoria N. S	×
Cape Negro	Shelburne N. S	258
Cape Negro Island	Shelburne N. S	×
Cape Ozo	Gaspe Q	×
Cape Rich	Grey, E. R. O	×
Cape Sable Island	Shelburne N. S	608
Cap La Ronde	Richmond N. S	×
Cap Magdeleine	Champlain Q	×
Cap Rouge	Quebec Q	700
* *Cap Santé*	Portneuf Q	1,300
Cape Spear	Westmoreland N. B	×
Cape Station	Albert N. B	×
Cape Traverse	Prince P. E. I	250
Cape Wolfe	Prince P. E. I	150
Caplin River	Bonaventure Q	×
Cap St. Ignace	Montmagny Q	×
Capucins	Rimouski Q	×
* *Caraquet*	Gloucester N. B	3,700
Carberry	Marquette M	250
Cardigan Bridge	King's P. E. I	×
Cardigan Road	King's P. E. I	×
* *Cardinal*	Grenville, S. R. O	700
Cardwell	Cardwell O	×
Cargill	Bruce, E. R. O	×
Carholme	Norfolk, S. R. O	×
Carillon	Argenteuil Q	600
Carleton	Bonaventure Q	500
* *Carleton*	St. John N. B	4,800
Carleton	Prince P. E. I	×
* *Carleton Place*	Lanark, S. R. O	2,000
Carling	Muskoka & P. S'd O	×
Carlingford	Perth, S. R. O	100
Carlingford	Victoria N. B	×
Carlingville	Marquette M	×
Carlisle	Wentworth, N. R. O	200
Carlisle	Carleton N. B	×
Carlow	Huron, W. R. O	×
Carlow	Carleton N. B	500
Carlsruhe	Bruce, E. R. O	160
Carlton	Yarmouth N. S	×
Carlton West	York, W. R. O	500
Carluke	Brant, N. R. O	×
Carlyle	Assa	×
Carman	Selkirk M	110
Carmanville	Addington O	×
Carmunnock	Perth, N. R. O	×
Carnarvon	Victoria, N. R. O	×
Carnduff	Assa	×
Caron	Assa	×
Caron Brook	Victoria N. B	×
Carp	Lanark, N. R. O	210
Carpenter	Queen's N. B	×
Carriboo Cove	Richmond N. S	250
Carriboo Marsh	Cape Breton N. S	×
Carriboo River	Pictou N. S	×
Carriboo Gold Mines	Halifax N. S	×
Carroll's Corners	Halifax N. S	×
Carrolton	Selkirk M	×


82
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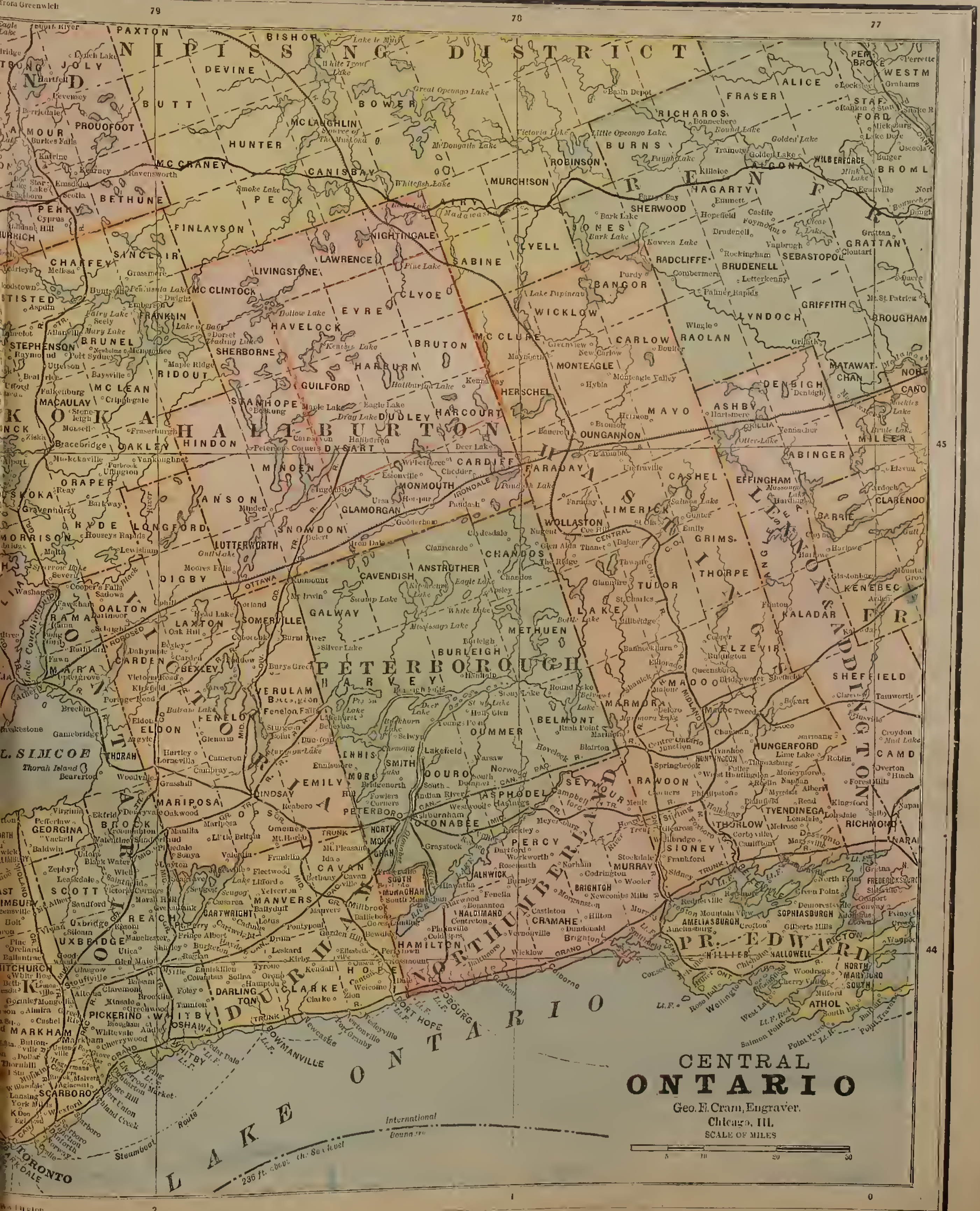
GEORGIAN BAY
LAKE HURON
NOTTAWASAGA BAY
ASSIGNACK
Manitowaning
Hilly Grove
South Bay
Club Isl.
Lonely Island
Fitzwilliam Island
Bear Isl.
Cove Island
Flower Pot Isl.
Cape Hurd
Tobermory
Wingfield Pt.
Cabots Head
Dyer Bay
ST. EDMUNDS
DYER BAY
Cape Chin
Abernethy
LINDSAY
Stokes Bay
Lions Head
Barrier Isl.
Cape Croker
Spry
EASTNOR
Hope Ness
Hay Isl.
Pike Bay
Hope Bay
Griffith Isl.
ALBEMARLE
White Cloud Isl.
Red Bay
Lake Sky
Fishing Is.
Chiefs Point
Oliphant
Wiarton
Colpoys Bay
North Keppel
Lake Charles
KEPPEL
AMABEL
Owen Sound
Southampton
Port Elgin
SAUGEEN
ARRAN
ELDERSLIE
BRUCE
Paisley
Chesley
Inverhuron
Tiverton
KINCARDINE
KINCARDINE
GREENOCK
BRANT
Walkerton
HURON
KINLOSS
CULROSS
CARRICK
Lucknow
Teeswater
Ripley
ASHFIELD
WEST WAWANOSH
EAST WAWANOSH
TURNBERRY
Wingham
HOWICK
COLBORNE
GODERICH
Goderich
Clinton
HULLETT
McKILLOP
Seaforth
Bayfield
MORRIS
GREY
Brussels
WALLACE
ELMA
Listowel
MORNINGTON
WELLESLEY
WOOLWICH
PEEL
MARYBORO
MINTO
Harriston
Palmerston
ARTHUR
Mount Forest
NORMANBY
BENTINCK
Durham
EGREMONT
GLENELG
PROTON
HOLLAND
SULLIVAN
DERBY
SYDENHAM
OWEN SOUND
ST. VINCENT
Meaford
EUPHRASIA
COLLINGWOOD
Thornbury
Collingwood
ARTEMESIA
OSPREY
MELANCTHON
NOTTAWASAGA
SUNNIDALE
MULMUR
AMARANTH
GARAFRAXA
ERAMOSA
NICHOL
Fergus
Elora
Guelph
GUELPH
Orangeville
CALEDON
MONO
ADJALA
TECUMSETH
ESSA
VESPRA
Barrie
INNISFIL
ORO
MEDONTE
TINY
TAY
FLOS
Midland
Penetanguishene
Christian Island
Hope Isl.
Beckwith Islands
La Fontaine
Victoria Harbor
MATCHEDASH
BAXTER
WOOD
GIBSON
FREEMAN
MUSKOKA
MEDORA
Lake Muskoka
Lake Joseph
CONGER
HUMPHREY
COWPER
FOLEY
CARDWELL
CHRISTIE
MONTEITH
McDOUGALL
Parry Sound
CARLING
FERGUSON
McKELLAR
SHAWANAGA
HAGERMAN
SPENCE
BURPEE
HARRISON
BURTON
CROFT
CHAPMAN
RYERSON
WALLBRIDGE
PARRY SOUND
BROWN
McKENZIE
FERRIE
LOUNT
ALBION
KING
VAUGHAN
CHINGUACOUSY
PEEL
TORONTO
Brampton
ESQUESING
Newmarket
GWILLIMBURY
HOLLAND LDG.
Aurora
Bradford
Cookstown
Alliston
Shelburne
Dundalk
Hanover
Chatsworth
Markdale
Flesherton
Chesley
Mildmay
Clifford
Drayton
Elmira
Milverton


from Greenwich
79
78
77
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44
NIPISSING DISTRICT
HALIBURTON
PETERBOROUGH
NORTHUMBERLAND
DURHAM
VICTORIA
ONTARIO
RENFREW
HASTINGS
LENNOX & ADDINGTON
PR. EDWARD
FRONTENAC
MUSKOKA
L. SIMCOE
LAKE ONTARIO
International Boundary
236 ft. above the Sea level
Steamboat Route
PAXTON
BISHOP
DEVINE
BUTT
BOWER
ALICE
FRASER
RICHARDS
HUNTER
MC LAUGHLIN
BURNS
MC CRANEY
CANISBAY
MURCHISON
ROBINSON
HAGARTY
SHERWOOD
BETHUNE
PECK
FINLAYSON
NIGHTINGALE
LYELL
JONES
RADCLIFFE
BRUDENELL
SEBASTOPOL
GRATTAN
SINCLAIR
LAWRENCE
SABINE
LIVINGSTONE
MC CLINTOCK
CLYDE
EYRE
BANGOR
WICKLOW
GRIFFITH
LYNDOCH
BROUGHAM
HAVELOCK
SHERBORNE
BRUTON
MC CLURE
CARLOW
RAGLAN
HARBURN
MONTEAGLE
GUILFORD
HERSCHEL
DENBIGH
MATAWATCHAN
RIDOUT
STANHOPE
DUDLEY
HARCOURT
MAYO
ASHBY
HINDON
DYSART
CARDIFF
DUNGANNON
MILLER
ABINGER
MINDEN
MONMOUTH
FARADAY
CASHEL
EFFINGHAM
ANSON
GLAMORGAN
LIMERICK
WOLLASTON
BARRIE
CLARENDON
LONGFORD
SNOWDON
CHANDOS
GRIMS.
LUTTERWORTH
ANSTRUTHER
TUDOR
THORPE
DIGBY
CAVENDISH
KENEBEC
OALTON
LAXTON
SOMERVILLE
GALWAY
LAKE
KALADAR
METHUEN
BURLEIGH
ELZEVIR
CARDEN
BEXLEY
HARVEY
MADOC
SHEFFIELD
VERULAM
FENELON
ELDON
BELMONT
MARMORA
DUMMER
HUNGERFORD
CAMDEN
THORAH
ENNISMORE
SMITH
DOURO
RAWDON
EMILY
ASPHODEL
SEYMOUR
MARIPOSA
OPS
OTONABEE
TYENDINAGA
RICHMOND
BROCK
GEORGINA
THURLOW
SIDNEY
PERCY
MURRAY
CAVAN
SOUTH MONAGHAN
ALNWICK
BRIGHTON
SCOTT
MANVERS
CARTWRIGHT
HALDIMAND
CRAMAHE
AMELIASBURGH
SOPHIASBURGH
REACH
UXBRIDGE
HAMILTON
HILLIER
HALLOWELL
NORTH MARYSBURGH
SOUTH MARYSBURGH
ATHOL
CLARKE
DARLINGTON
WHITBY
PICKERING
MARKHAM
SCARBORO
TORONTO
OSHAWA
BOWMANVILLE
PORT HOPE
COBOURG
LINDSAY
PETERBORO
HALIBURTON
MINDEN
BRACEBRIDGE
GRAVENHURST
BELLEVILLE
TRENTON
PICTON
NAPANEE
PEMBROKE
RENFREW

CENTRAL
ONTARIO

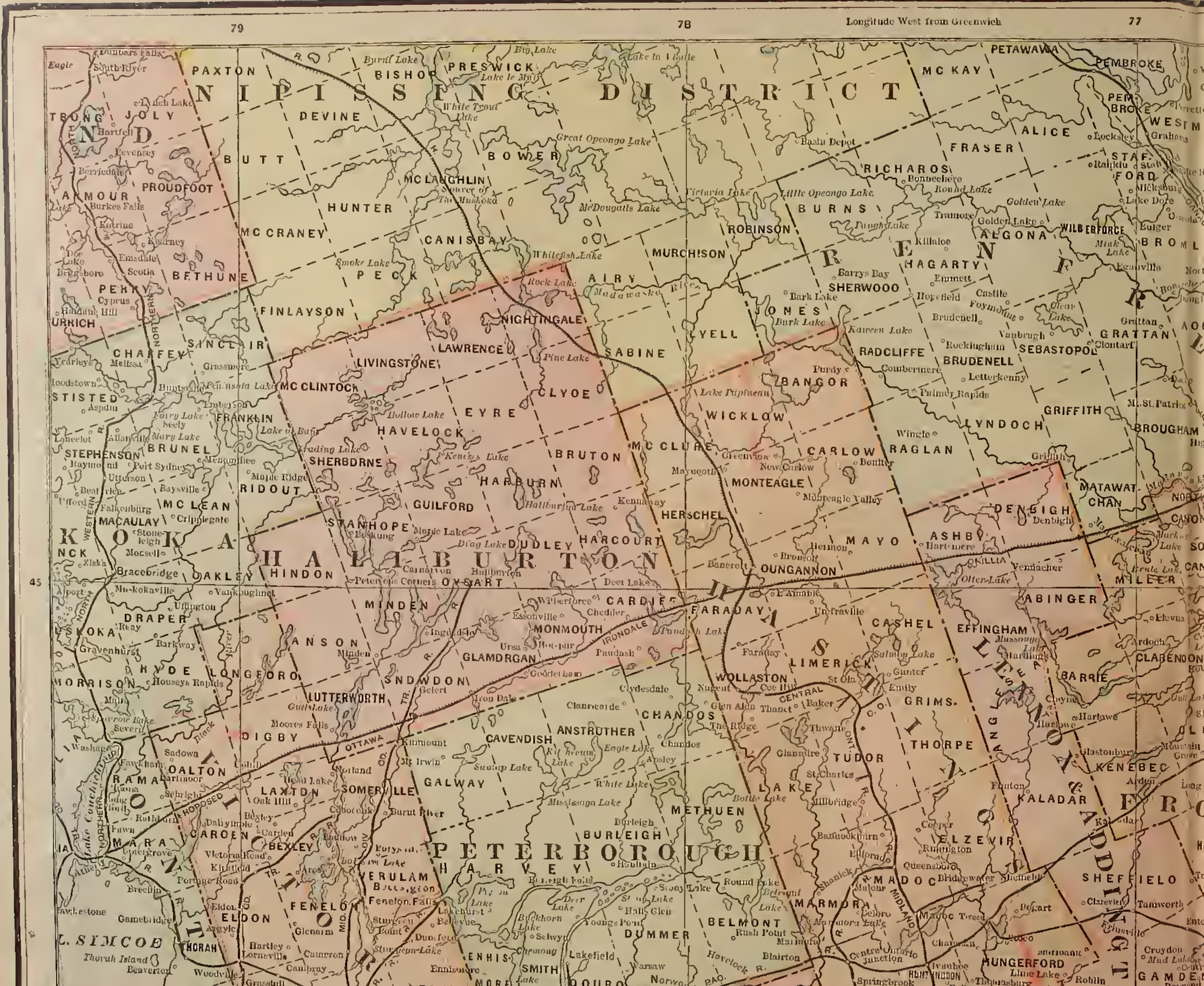
Geo. F. Cram, Engraver.
Chicago, Ill.
SCALE OF MILES
5 10 20 30

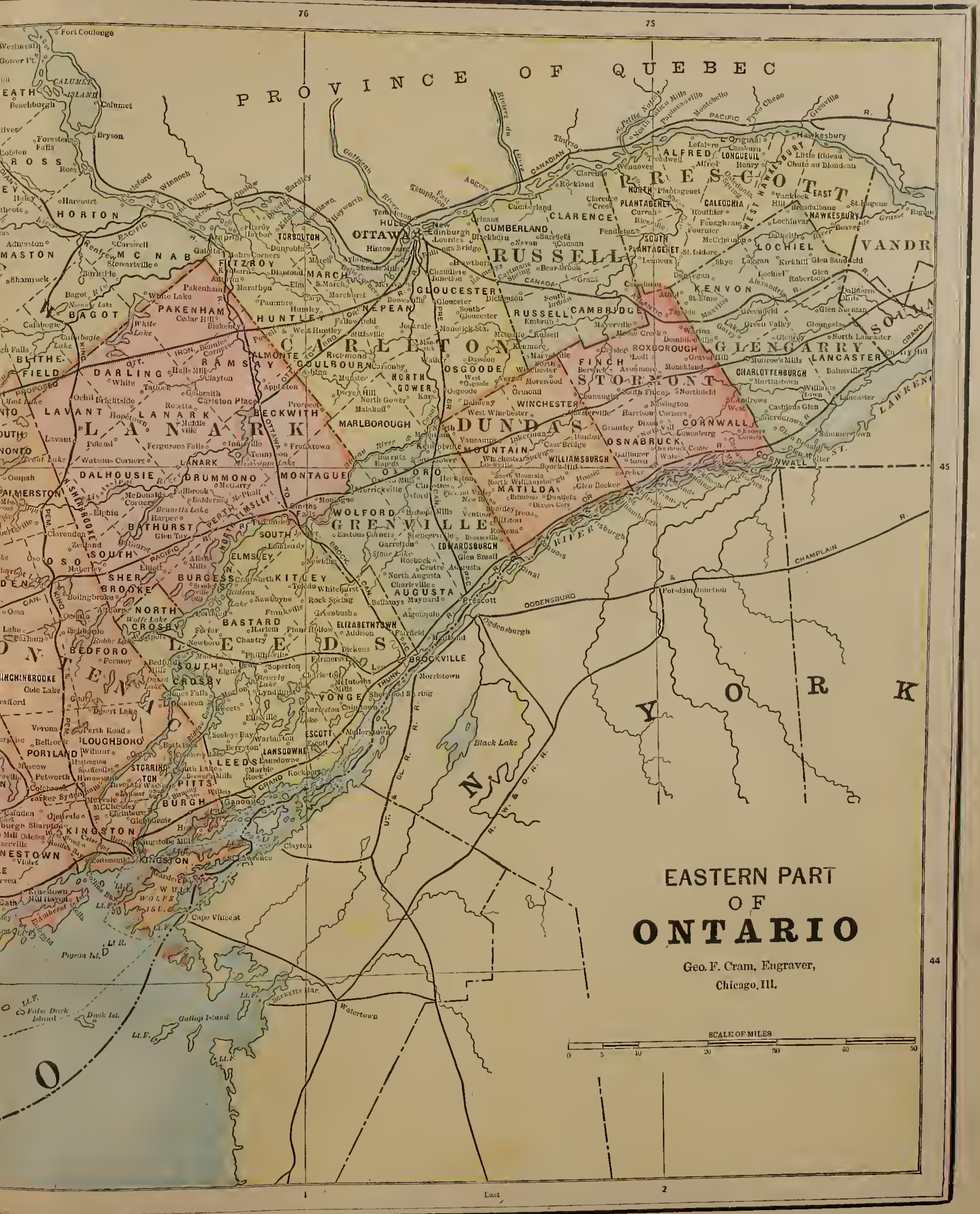
LIST OF POST OFFICES IN CANADA, 1887.

POST OFFICE.	ELECTORAL DISTRICT.	POP.
Carrville	York, W. R. O	×
Carsan	Assa	×
Carsonby	Carleton O	×
Carsonville	King's N. B	×
Carssdale	Assiniboia N. W. T	×
Carswell	Renfrew, S. R. O	×
Carthage	Perth, N. R. O	100
Carter's Point	King's N. B	×
Carterton	Algoma O	×
Cartier	Algoma O	×
Cartier	Beauharnois Q	×
Cartierville	Jacques-Cartier Q	×
Cartwright	Durham, W. R. O	500
Cartwright	Selkirk M	100
Casault	Montmagny Q	×
Cascades	Ottawa Q	×
Case Settlement	King's N. B	×
Cashel	York, E. R. O	×
Cashion's Glen	Glengarry O	×
Cashmere	Middlesex, W. R. O	×
Cashtown	Simcoe, N. R. O	×
Cass Bridge	Dundas O	×
Cassburn	Prescott O	300
Cassel	Oxford, N. R. O	×
Casselman	Russell O	×
Cassilis	Northumberland N. B	×
Castalia	Charlotte N. B	×
Castile	Renfrew, N. R. O	×
Castleavery	Marquette M	×
Castlebar	Richmond Q	×
Castlederg	Cardwell O	×
Castleford	Renfrew, N. R. O	×
Castlemore	Peel O	200
Castleton	Northumberland, E. R. O	450
Catalone	Cape Breton N. S	×
Cataline Gut	Cape Breton N. S	×
Cataract	Cardwell O	200
Cataraqui	Frontenac O	800
Cathcart	Oxford, S. R. O	100
Caughnawaga	Laprairie Q	200
Causapscal	Rimouski Q	100
Cavignac	Bagot Q	×
Cavan	Durham, E. R. O	200
Cavendish	Queen's P. E. I	200
Cavendish Road	Queen's P. E. I	×
* *Cayuga*	Haldimand O	1,012
Cazaville	Huntingdon Q	100
Cecebe	Muskoka & P. S'd O	×
Cedar Camp	King's N. B	×
Cedar Dale	Ontario, S. R. O	400
Cedar Grove	York, E. R. O	380
Cedar Hill	Lanark, N. R. O	×
Cedar Hall	Rimouski Q	×
Cedar Lake	Digby N. S	×
Cedar Mills	Cardwell O	×
Cedar Springs	Kent O	250
Cedars	Soulanges Q	800
Cedarville	Grey, E. R. O	100
Central Argyle	Yarmouth N. S	×
Central Bedeque	Prince P. E. I	×
Central Blissville	Sunbury N. B	×
Central Clarence	Annapolis N. S	×
Central Cambridge	Queen's N. B	×
Central Chebogue	Yarmouth N. S	×
Centralia	Middlesex, N. R. O	160
Central Grove	Digby N. S	×
Central Hampstead	Queen's N. B	×
Central Haynesville	York N. B	×
Central Kingsclear	York N. B	×
Central New Annan	Colchester N. S	×
Central Norton	King's N. B	×
Central Onslow	Colchester N. S	×
Centre Augusta	Grenville, S. R. O	215
Centreton	Northumberland, W. R. O	×
Centreton	King's N. B	×
Centre Village	Westmoreland N. B	×
Centreville	Addington O	300
Centreville	Carleton N. B	1,000
Centreville	King's N. S	250
Centreville	Digby N. S	500
Chaffey's Locks	Leeds, S. R. O	×
Chalk River	Renfrew, N. R. O	×
Chambers	Lennox O	×
Chambers Settlement	Kings N. B	×
Chambly Basin	Chambly Q	1,500
* *Chambly Canton*	Chambly Q	600
Chambord	Victoria N. B	×
Chambord	Chicoutimi Q	×
Champlain	Champlain Q	600
Chance Harbour	St. John N. B	×
Chance Harbour	Pictou N. S	×
Chandos	Peterborough, E. R. O	×
Channay	Beauce Q	×
Chanuelle	Montcalm Q	200
Chantry	Leeds, S. R. O	400
Chapeau	Pontiac Q	200
Chapleau	Algoma O	×
Chapman	Hastings, E. R. O	×
Chapman	Westmoreland N. B	×
Chapman Settlement	Cumberland N. S	×
Chard	Prescott O	100
Charing Cross	Kent O	110
Charlecote	Durham, E. R. O	×
Charlemagne	L'Assomption Q	×
Charlinch	Muskoka & P. S'd O	×
Charlesbourg	Quebec Q	650
Charleston	Leeds, S. R. O	100
Charleston	Carleton N. B	×
Charleville	Grenville, S. R. O	×
Charlos' Cove	Guysboro' N. S	×
Charlo Station	Restigouche N. B	×
Charlottetown	Queen's P. E. I	11,500
Charrington	Compton Q	×
Charteris	Pontiac Q	×
Chartierville	Compton Q	600
Chatuoro'	Argenteuil Q	400
Chateauguay	Chateauguay Q	×
Chateauguay Basin	Chateauguay Q	400
Chateau Richer	Montmorency Q	1,800
Chater	Selkirk M	×
* *Chatham*	Kent O	9,052
Chatham	Northumberland N. B	3,023
Chatillon	Yamaska Q	×
Chatsworth	Grey, N. R. O	436
Chatterton	Hastings, W. R. O	×
Chaudiere Curve	Levis Q	×
Chaudiere Mills	Levis Q	×
Chaudiere Station	Levis Q	×
Chaumont	Lotbiniere Q	×
Cheapside	Haldimand O	200
Chebogue Point	Yarmouth N. S	×
Cheddar	Peterborough, E. R. O	×
Chegoggin	Yarmouth N. S	×
Chelmsford	Northumberland N. B	×
* *Chelsea*	Ottawa Q	300
Chelsea	Lunenburg N. S	×
Cheltenham	Peel O	256
Chemainus	Vancouver B. C	100
Chemical Road	Albert N B	×
Chemin Tache	Temiscouata Q	×
Cheneville	Ottawa Q	×
Cheney Settlement	King's N B	
Chepstow	King's P E I	
Chepstowe	Bruce, E. R O	
Cherry Grove	King's P E I	×
Cherry Grove	Middlesex, E. R. O	×
Cherry River	Sherbrooke Q	300
Cherry Vale	Queen's N B	×
Cherry Valley	Prince Edward O	309
Cherry Valley	Queen's P E I	×
Cherrywood	Ontario, W. R O	100
* *Chesley*	Bruce, N. R. O	1,400
Chesley's Corners	Lunenburg N S	×
Chester	Arthabaska Q	×
Chester	Lunenburg N S	900
Chester	Carleton N B	×
Chester Basin	Lunenburg N S	300
Chesterfield	Brant, N. R O	300
Chester Grant	Lunenburg N S	×
* *Chesterville*	Dundas O	500
Cheticamp	Inverness N S	153
Cheticamp Chapel	Inverness N S	×
Chetwynd	Muskoka & P. S'd O	×
Chevalier	Essex, N. R. O	×
Cheverie	Hants N S	200
Cheviot	Bruce, E. R. O	100
Chichester	Pontiac Q	×
* *Chicoutimi*	Chicoutimi Q	1,900
Chignecto	Cumberland N S	×
Chilcoten	Carib-Lillooet B C	×
Chilliwack	N. Westminster B C	500
Chilton	Montcalm Q	×
Chimney Corner	Inverness N S	×
China Point	Queen's P E I	×
Chipman	Queen's N B	150
Chipman's Brook	King's N S	150
Chipman's Corners	King's N S	×
* *Chippawa*	Welland O	800
Chippawa Hill	Bruce, N. R. O	×
Chiselhurst	Huron, S. R. O	×
Chisholm	Prince Edward O	×
Chlorydormes	Gaspe Q	×
Chortitz	Provencher M	×
Christie	Wentworth, N. R. O	×
Christie's Corners	Leeds & Gren., N. R. O	×
Christina	Middlesex, S. R. O	×
Christmas Island	Cape Breton N S	600
Chumah	Marquette M	×
Churchill	Simcoe, S. R. O	100
Church Hill	Albert N B	×
Church Over	Shelburne N S	×
Church Point	Northumberland N B	×
Church Street	King's N S	×
Churchville	Peel O	200
Churchville	Pictou N S	×
Chute a Blondeau	Prescott O	400
Chute aux Iroquois	Ottawa Q	×
Chutes Cove	Annapolis N S	×
Clachan	Elgin, W. R O	×
Clairvaux de Bagot	Bagot Q	×
Clairvaux	Charlevoix Q	×
Clam Harbour	Halifax N S	×
Clanbrassil	Haldimand O	×
Clandeboye	Lisgar M	×
Clandeboye	Middlesex, N. R. O	200
Clanricarde	Peterboro', E. R O	×
Clanwilliam	Selkirk M	×
Clapham	Megantic Q	×
Clare	Assa	×
Claremont	Ontario, W. R. O	500
Claremont	Cumberland N S	×
Clarence	Russell O	150
Clarence	Annapolis N S	×
Clarence Creek	Russell O	200
* *Clarenceville*	Missisquoi Q	250
Clarendon	Charlotte N B	×
Clarendon Station	Addington O	×
Clarendon Station	Queen's N B	×
Clareview	Addington O	×
Clarke	Durham, W. R. O	×
Clarke's Harbour	Shelburne N S	×
Clarkleigh	Marquette M	×
* *Clarksburg*	Grey, E. R. O	800
Clark's Corners	Queen's N B	×
Clark's Road	Cape Breton N S	×
Clarkson	Peel O	×
Claude	Peel O	100
Clavering	Grey, N. R. O	×
Clayton	Lanark, N. R. O	200
Clear Creek	Norfolk, S. R. O	×
Clear Spring	King's P. E. I	×
Clear Springs	Provencher M	×
Clearwater	Selkirk M	×
* *Clearville*	Elgin, W. R. O	100
Clementsport	Annapolis N. S	307
Clementsvale	Annapolis N. S	250
Clermont	Prince P. E. I	×
Clevelands	Simcoe, E. R. O	×
* *Clifford*	Wellington, N. R. O	900
Clifton	Gloucester N. B	200
Clifton	King's N. B	252
Clifton	Colchester N. S	×
Clinch's Mills	St. John N. B	80
Clinton	Cariboo B. C	250
* *Clinton*	Huron, S. R. O	2,800
Clinton	Queen's P. E. I	×
Clones	Queen's N. B	×
Clontarf	Renfrew, S. R. O	×
Clover Bar	Alta	×
Cloverdale	Colchester N. S	×
Clover Hill	Simcoe, S. R. O	×
Clover Hill	King's N. B	×
Cloverville	Antigonishe N. S	×
Clover Valley	N. Westminster B. C	×
Cloyne	Addington O	×
Clyde	Wentworth, N. R. O	×
Clyde River	Shelburne N. S	300
Clyde River	Queen's P. E. I	×
Clydesdale	Peterboro', E. R. O	×
Clyde Station	Queen's P. E. I	×
Coal Branch Station	Kent N. B	×
Coal Creek	Queen's N. B	×
Coal Mines	Queen's N. B	×
Coates' Mills	Kent N. B	×
* *Coaticook*	Stanstead Q	2,800
Cobble Hill	Middlesex, E. R. O	×
Coboconk	Victoria, N. R. O	350
* *Cobden*	Renfrew, N. R. O	400
* *Cobourg*	Northumberland W. R. O	5,500
Cocagne	Kent N. C	900
Cocagne River	Kent N. B	×
Cocagne Cape	Kent N. B	×
Cochran's Lake	Cape Breton N. S	×
Cockburn Island	Algoma O	×
Codille's Harbour	Guysboro' N. S	×
Codrington	Northumberland, E. R. O	150
Cody's	Queen's N. B	×
Coe Hill Mines	Hastings, N. R. O	×
Cogmagun River	Hants N. S	×
Colbeck	Wellington, N. R. O	×
* *Colborne*	Northumberland, E. R. O	1,200
Colchester	Essex, S. R. O	200
Cold Brook Station	King's N. S	150
Cold Springs	Northumberland, W. R. O	700
Coldstream	Middlesex, S. R. O	100
Coldstream	Carleton N. B	×
Coldstream	Colchester N. S	×
Coldstream East	Carleton N. B	×
* *Coldwater*	Simcoe, E. R. O	450
Colebrook	Addington O	200
Cole Harbour	Guysboro' N. S	106
Cole Lake	Addington O	×
Coleman	York, E. R. O	×
Coleman	Prince P. E. I	×
Coleraine	Peel O	200
Coleraine Station	Megantic Q	×
Cole's Corners	Lambton, W. R. O	×
Cole's Island	Queen's N. B	300
Colenso	Grey, E. R. O	×
Colinville	Lambton, W. R. O	250
Colgan	Simcoe, S. R. O	×
College Bridge	Westmoreland N. B	100
Collfield	Pontiac Q	100
Collina	King's N. B	352
* *Collingwood*	Simcoe, N. R. O	5,111
Collin's Bay	Frontenac O	150
Collin's Inlet	Algoma O	150
Colpoy's Bay	Bruce, N. R. O	×
Colquhoun	Dundas O	×
Columbus	Ontario, S. R. O	325
Colwell	Simcoe, N. R. O	×
Colwood	Victoria B. C	×
Comber	Essex, N. R. O	400
Combermere	Renfrew, S. R. O	100
Comet	Essex, S. R. O	×
Comeauville	Digby N. S	×
Commercial Cross	King's P. E. I	100
Commanda	Muskoka & P. S'd O	×
Como	Vaudreuil Q	300
Comox	Vancouver B. C	400
* *Compton*	Compton Q	500
Conboyville	Brant, S. R. O	×
Concession	Digby N. S	×
Concord	York, W. R. O	×
Condon Settlement	King's N. S	×
Conestogo	Waterloo, N. R. O	400
Coningsby	Wellington, S. R. O	×
Conn	Wellington, N. R. O	×
Connaught	Dundas O	500
Connell	Carleton N. B	×
Connor	Cardwell O	150
Conns Mills	Cumberland N. S	..
Conquerall Bank	Lunenburg N. S	315
Conquerall Mills	Lunenburg N. S	×
Conroy	Perth, S. R. O	×
Consecon	Prince Edward O	600
Constance	Huron, S. R. O	×
Contrecœur	Vercheres Q	200
Conway	Lennox O	1,500
Conway Station	Prince P. E. I	×
Cook's Brook	Halifax N. S	×
Cook's Cove	Guysborough N. S	×
Cook's Creek	Lisgar M	×
* *Cookshire*	Compton Q	300
* *Cookstown*	Simcoe, S. R. O	600
Cooksville	Peel O	400
Cookville	Westmoreland N. B	×
Cooper	Hastings, N. R. O	×
Cooper's Falls	Ontario, N. R. O	×
Copenhagen	Elgin, E. R. O	×
Copetown	Wentworth, N. R. O	200
Copleston	Lambton, E. R. O	×
Copper Lake	Antigonishe N. S	×
Corberrie	Digby N. S	150
Corbetton	Grey, E. R. O	×
Corbett	Middlesex, N. R. O	×
Corbin	Huntingdon Q	130
Corbyville	Hastings, E. R. O	×
Corinth	Elgin, E. R. O	×
Cork Station	York N. B	×
Corliss	Stanstead Q	×
Cornell	Oxford, S. R. O	×
Corner of the Beach	Gaspe Q	×
Corn Hill	King's N. B	×
Corn Hill East	King's N. B	×
* *Cornwall*	Cornwall O	6,805
Cornwall Centre	Cornwall O	×
Cornwall	Queen's P. E. I	×
Corraville	King's P. E. I	×
Corson's Siding	Victoria, N. R. O	×
Corunna	Lambton, W. R. O	300
Corwhin	Wellington, S. R. O	×
Costigan	Victoria N. B	×
Coteau du Lac	Soulanges Q	350
Coteau Landing	Soulanges Q	600
Coteau Station	Soulanges Q	300
Cote des Neiges	Hochelaga Q	1,200
Cote St. Antoine	Hochelaga Q	×
Cote St. Louis	Hochelaga Q	2,000
Cote St. Michel	Hochelaga Q	400
Cote St. Paul	Hochelaga Q	1,500
Cote St. Pierre	Ottawa Q	×
Cote Visitation	Hochelaga Q	×
Cotswold	Wellington, N. R. O	×
Cottam	Essex, S. R. O	230
Cottesloe	Peterboro', E. R. O	×
Coughlan	Northumberland N. B	×
Coulson	Simcoe, E. R. O	×
County Line	Queen's P. E. I	×
Courtland	Norfolk, N. R. O	350
Courtice	Durham, W. R. O	×
Coulee	Yale-Kootenay B. C	×
Courtright	Lambton, W. R. O	500
Covehead Road	Queen's P. E. I	×
Coventry	Cardwell O	×
Coverdale	Albert N. B	250
Coverley	Grey, S. R. O	×
Covey Hill	Huntingdon Q	140
Cowal	Elgin, W. R. O	×
Cowansville	Missisquoi Q	800
Cow Bay	Cape Breton N. S	1,986
Cowichan	Vancouver B C	×
Coxheath	Cape Breton N S	×
Cox's Point	Queen's N B	×
Craighurst	Simcoe, E. R. O	160
Craigie Lea	Simcoe, E. R. O	×
Craiglehn	Selkirk M	×
Craigleith	Grey, E. R. O	×
Craigsholme	Wellington, C. R. O	×
Craig Road Station	Levis Q	×
Craigvale	Simcoe, S. R. O	×
Crampton	Middlesex, E. R. O	×
Cranbourne	Dorchester Q	×
Cranbrook	Huron, E. R. O	300
Cranbrook	Yale-Kootenay B C	×
Cranston	Haldimand O	×
Cranton Section	Inverness N S	×
Cranworth	Leeds, S. R. O	×
Crapaud	Queen's P E I	300
Craven	Assa	×
Crawford	Grey, S. R. O	×
Credit	Peel O	0
Credit Forks	Cardwell O	×
Crediton	Middlesex, N. R. O	500
Creeford	Selkirk M	×
Creek Bank	Wellington, C. R. O	×
* *Creemore*	Simcoe, N. R. O	600
Creemorne	Pontiac Q	×
Creighton	Simcoe, E. R. O	×
Crescent Lake	Assa	×
Cressy	Prince Edward O	100
Creswell	Victoria, S. R. O	×
Crewe	Marquette M	×
Crewe	Huron, W. R. O	×
Crieff	Wellington, S. R. O	×
Crinan	Elgin, W. R. O	×
Crofton	Prince Edward O	×
Croft	Antigonishe N S	×
Cromarty	Perth, S. R. O	150
Cross Creek	York N B	×
Crosshill	Waterloo, N. R. O	150
Cross Lake Station	M	×
Crossland	Simcoe, N. R. O	×
Crosspoint	Bonaventure Q	220
Cross Rds., Cy. Har.	Guysborough N S	×
Cross Rds., M. Mel'l.	Guysborough N S	×
Cross Roads, Ohio	Antigonishe N S	×
Cross Rds., St. G. Chl.	Richmond N S	×
Croton	Bothwell O	×
Crowell	Shelburne N S	×
Crowe's Mills	Colchester N B	×
Crow Bay	Northumb., E. R. O	×
Crow Harbour	Guysborough N S	×
Crowland	Welland O	×
Crown Hill	Simcoe, E. R. O	×
Croydon	Addington O	125
Cruickshank	Grey, N. R. O	×
Crumlin	Middlesex, E. R. O	×
Crysler	Stormont O	260
Crystal City	Marquette M	150
Culdaff	Dorchester Q	×
Culloden	Norfolk, N. R. O	400
Culloden	Digby N S	×
Cultus	Norfolk, S. R. O	×
Cumberland	Russell O	250
Cumberland Bay	Queen's N B	×
Cumberland Mills	Beauce Q	×
Cumberland Point	Queen's N B	×
Cumming's Bridge	Russell O	200
Cumming's Cove	Charlotte N B	×
Cumminsville	Halton O	200
Cumnock	Wellington, C. R. O	×
Curran	Prescott O	225
Currie's Crossing	Oxford, S. R. O	×
Curry Hill	Glengarry O	×
Curryville	Albert N B	×
Cushendall	Frontenac O	100
Cushing	Argenteuil Q	600
Cyprus	Muskoka & P. S'd O	×
Dacre	Renfrew, S. R. O	150
Dablon	Chicoutimi Q	×
Dale	Durham, E. R. O	×
Dalesboro'	Assa	×
Dalesville	Argenteuil Q	×
Dalhousie	Restigouche N B	607
Dalhousie, East	King's N S	×
Dalhousie Junction	Restigouche N B	×
Dalhousie Mills	Glengarry O	100
Dalhousie Road	Lunenburg N. S	×
Dalhousie Settlement	Pictou N. S	×
Dalibaire	Rimouski Q	1,000
Dalkeith	Glengarry O	100
Dalling	Shefford Q	250
Dalmeny	Russell O	×
Dalrymple	Victoria, N. R. O	×
Dalston	Simcoe, N. R. O	×
Dalton	Selkirk M	×
Damascus	Wellington, N. R. O	×
Danby	Drummond Q	200
Danford Lake	Pontiac Q	×
Danforth	York, E. R. O	×
Daniel	Queen's N. B	×
Dante	Bothwell O	×
* *Danville*	Richmond Q	1,250
D'Arcy	Frontenac O	×
Darlingford	Selkirk M	×
Darlington	Queen's P. E. I	×
Darling Road	Monck O	×
Darnley	Prince P. E. I	×
Darrell	Bothwell O	×
Dartford	Northumb. E. R. O	160
Dartmoor	Victoria, N. R. O	×
* *Dartmouth*	Halifax N. S	6,249
Dashwood	Huron, S. R. O	300
D'Auteuil	Arthabaska Q	400
Davenport	York, W. R. O	100
Davison Street	King's N. S	×
Davisville	York, E. R. O	200
Dawn Mills	Bothwell O	120
Dawson	Russell O	×
Dawson Settlement	Albert N. B	×
Dawsonville	Restigouche N. B	×
Day Mills	Algoma O	×
Day's Corner	King's N. B	×
Dayspring	Lunenburg N. S	×
Deacon	Renfrew, N. R. O	×
Dealtown	Kent O	×
Dean	Halifax N. S	×
Deans	Haldimand O	200
De Bec	Carleton N. B	125
Debert Station	Colchester N. S	×
De Cewsville	Monck O	200
DeClare	Marquette M	×
Deebank	Muskoka & P. S'd O	×
Deemerton	Bruce, E. R. O	×
Deep Brook	Annapolis N. S	×
Deerfield	Yarmouth N. S	×
Deerhurst	York, N. R. O	×
Deer Lake	Peterboro', E. R. O	×
Deer Park	York, E. R. O	×
Dee Side	Bonaventure Q	×
Delap's Cove	Annapolis N. S	×
Delaware	Middlesex, S. R. O	800
Delhaven	King's N. S	×
* *Delhi*	Norfolk, N. R. O	750
Deloraine	Selkirk M	×
Delaro	Hastings, E. R. O	150
Delmer	Norfolk, N. R. O	×
Delta	Leeds, S. R. O	500
Demorestville	Prince Edward O	300
Dempsey's Corner	King's N. S	×
Denbigh	Addington O	×
Denfield	Middlesex, E. R. O	×
Denison's Mills	Richmond Q	×
Dennistown	Inverness N. S	×
Densmore's Mills	Hants N. S	×

LIST OF POST OFFICES IN CANADA.

POST OFFICE.	ELECTORAL DISTRICT.	POP.
Denville	Muskoka & P, S'd O	×
Dequen	Chicoutimi Q	×
De Ramsay	Joliette Q	300
Derby	Northumberland N. B	200
Dereham Centre	Norfolk, S. R. O	100
Derrynane	Wellington, N. R. O	×
Derry, West	Peel O	×
Derryville	Ontario, N. R. O	×
Derwent	Middlesex, E. R. O	×
De Sable	Queen's P. E. I	×
Desboro'	Grey, N. R. O	×
* *Deschambault*	Portneuf Q	1,000
Desert	Algoma O	×
* *Deseronto*	Hastings, E. R. O	2,100
Desert Lake	Addington O	×
Desford	Selkirk M	×
Desjardins	Megantic Q	×
Desmond	Addington O	×
Deux Rivieres	Dist. of Nipissing O	×
Devizes	Middlesex, E. R. O	×
De Wolf	Charlotte N. B	×
Dewittville	Huntingdon Q	100
Dexter	Elgin, E. R. O	107
Diamond	Lanark, N. R. O	208
Dickenson	Russell O	×
Dickinson's Landing	Stormont O	300
Digby	Digby N. S	1,951
Dillonton	Brome Q	×
Dingwall	Victoria N. S	×
Dipper Harbour	St. John N. B	×
Dirleton	Carleton O	×
Discouse	Richmond N. S	1 000
D'Israeli	Wolfe Q	300
Dixie	Peel O	400
Dixon	Stormont O	×
Dixon's Corners	Dundas O	100
Dixon's Point	Kent N. B	×
Dixville	Stanstead Q	300
Doaktown	Northumberland N. B	400
Dobbinton	Bruce, N. R. O	×
Dobson's Corner	Westmoreland N. B	×
Doctor's Brook	Antigonishe N. S	*
Doctor's Cove	Shelburne N. S	×
Doe Lake	Muskoka & P. S'd O	×
Dog Creek	Cariboo Lillooet B. C	×
Doherty	Sunbury N. B	×
Doherty's Mills	Kent N. B	×
Doherty Creek	Cumberland N. S	×
Dolbeau	Saguenay Q	×
Dollar	York, E. R O	×
Dolson	Kent O	×
Domaine de Gentilly	Nicolet Q	×
Dominion City	Provencher M	200
Dominionville	Glengarry O	250
Domville	Grenville, S. R. O	100
Don	York, E. R O	×
Donald	Yale-Kootenay B. C	300
Doncaster	York, E. R. O	×
Donegal	Perth, N. R. O	×
Donegal	King's N. B	×
Donore	Lisgar M	×
Doon	Waterloo, S. R. O	200
Dorchester	Westmoreland N. B	800
Dorchester Crossing	Westmoreland N. B	×
Dorchester Station	Middlesex, E. R. B	×
Dorking	Waterloo, N. R. O	×
Dornoch	Grey, N. R. O	×
Dorn Ridge	York N. B	×
Dorset	Ontario, N. R. O	×
Dorland	Lennox O	×
Dorval	Jacques-Cartier Q	×
Douglas	Renfrew, N. R. O	150
Douglas	York N. B	209
Douglasfield	Northumberland N. B	×
Douglas Harbour	Queen's N. B	200
Douglas Lake	Yale-Kootenay B. C	×
Douglas Station	Selkirk M	×
Douglastown	Gaspe Q	1,100
Douglastown	Northumberland N. B	×
Dover	Westmoreland N. B	×
Dovercourt	York, W. R. O	×
Dover Hill	Victoria N. B	×
Dover, South	Kent O	150
Dover, West	Halifax N. S	×
Downeyville	Victoria, S. R. O	×
Downeyville	King's N. B	×
Downsview	York, W. R. O	×
Doyle	Pontiac Q	×
Doyles	Kent O	×
Doyles Brook	Northumberland N. B	×
Doyle Settlement	Restigouche N. B	×
Dracon	Wellington, C. R. O	×
Drayton	Wellington, C. R. O	850
* *Dresden*	Bothwell O	2,500
Drew	Wellington, N. R. O	×
Dromore	Grey, S. R. O	×
Dromore	Queen's P. E. I	×
Drum	Durham, E. R. O	×
Drumbo	Brant, N. R. O	600
Drumconnor	Marquette M	×
* *Drummondville, E.*	Drummond Q	2,000
Drumquin	Halton O	100
Drysdale	Huron, S. R. O	×
Dry River	Selkirk M	×
Duart	Elgin, W. R. O	250
Dublin	Perth, S. R. O	850
Dublin Shore	Lunenburg N. S	×
Duck and Pringle	Yale B. C	×
Duclos	Ottawa Q	×
Dudswell Centre	Wolfe Q	×
Dufferin Bridge	Muskoka & P. S'd O	×
Dufresne Mills	Bagot Q	×
Dufferin Mines	Halifax N. S	×
Dumbarton Station	Charlotte N. B	×
Dunblane	Bruce, W. R. O	×
Dumfries	York N. B	×
Dumfries	Gloucester N. B	×
Dumoine	Pontiac Q	×
Dunany	Argenteuil Q	×
Dunbar	Dundas O	300
* *Dunbarton*	Ontario, W. R. O	150
Dunboro'	Missisquoi Q	×
Dunbow	Alta	×
Dunboyne	Elgin, E. R. O	×
Duncan	Grey, E. R. O	×
Duncan	Lunenburg N. S	×
Dunchurch	Muskoka & P. S'd O	×
Dunerief	Middlesex, S. R. O	×
* *Dundalk*	Grey, E. R. O	750
* *Dundas*	Wentworth, N. R. O	4,000
Dundas	King's P. E. I	200
Dundee	Huntingdon Q	×
Dundee	Restigouche N. B	×
Dundee	Lisgar M	×
Dundee	Richmond N. S	×
Dundela	Dundas O	200
Dundonald	Northumberl'd, E. R. O	125
Dunedin	Simcoe, N. R. O	×
* *Dungannon*	Huron, N. R. O	250
Dunglyen	Westmoreland N. B	×
Dunham	Missisquoi Q	400
Dunkeld	Bruce, E. R. O	×
Dunlop	Huron, C. R. O	×
Dunkerron	Simcoe, S. R. O	×
Dunmaglass	Antigonishe N. S	×
Dunmore	Antigonishe N. S	×
Dunmore Junction	Assa	×
Dunvegan	Glengarry O	250
Dunvegan	Inverness N. S	×
* *Dunnville*	Monck O	1,800
Dunphy	Northumberland N. B	×
Dunraven	Pontiac Q	×
Dunrobin	Carleton O	100
Dunsford	Victoria, S. R. O	×
Duntroon	Simcoe, N. R. O	150
Dupey's Corner	Westmoreland N. B	×
* *Durham*	Grey, S. R. O	1,300
Durham	Pictou N. S	×
Dutch Settlement	Halifax N. S	×
Dutch Village	Halifax N. S	×
* *Dutton Station*	Elgin, W. R. O	700
Dwight	Muskoka & P. S'd O	×
Dyer's Bay	Bruce, N. R. O	100
Dwyer Hill	Carleton O	×
Dynevor	Lisgar M	×
Eady	Simcoe, E. R. O	×
Eagle	Elgin, W. R. O	×
Ealing	Middlesex, E. R. O	×
Eamer's Corners	Cornwall O	×
Eardley	Ottawa Q	900
Earltown	Colchester N. S	300
East Angus	Compton Q	330
East Arthabaska	Arthabaska Q	×
East Baltic	King's P. E. I	×
East Bay	Cape Breton N. S	250
East Bay, N. Side	Cape Breton N. S	×
East Bolton	Brome Q	104
East Broughton	Beauce Q	×
East Chebogue	Yarmouth N. S	×
East Chezzetcook	Halifax N. S	×
East Clifton	Compton Q	200
East Dover	Halifax N. S	×
East Dudswell	Wolfe Q	×
East Dunham	Missisquoi Q	100
East Earltown	Colchester N. S	×
Eastern Harbour	Inverness N. S	×
East Farnham	Brome Q	250
East Folly Mountain	Colchester N. S	×
East Hall's Hbr. B'd	King's N. S	×
East Hereford	Compton Q	×
East Jeddore	Halifax N. S	×
East Linton	Grey, N. R. O	×
East Magdala	Megantic Q	×
East Margaree	Inverness N. S	×
Eastman	Brome Q	200
Eastman's Spring	Russell O	100
East Mapleton	Cumberland N. S	×
East Margaretsville	Annapolis N. S	×
East Mines Station	Colchester N. S	×
East New Annan	Colchester N. S	×
Easton's Corners	Grenville, N. R. O	550
East Oro	Simcoe, E. R. O	×
East Point	King's P. E. I	×
East Port Medway	Queen's N. S	×
East River	Lunenburg N. S	×
East River, St. Mary's	Pictou N. S	×
East River Sheet Har.	Halifax N. S	×
East Rogerville	Northumberland N. B	×
East Scotch Sett	King's N. B	×
East Selkirk	Lisgar M	×
East Sherbrooke	Sherbrooke Q	×
E side Marg'ree Har.	Inverness N. S	×
E side Pub. Harbour	Yarmouth N. S	×
E side Ragged Island	Shelburne N. S	×
East Templeton	Ottawa Q	320
Eastville	Colchester N. S	×
East Wentworth	Cumberland N. S	×
East Wallace	Cumberland N. S	×
East Williamsburgh	Dundas O	120
Eastwood	Oxford, S R O	200
Eaton	Compton Q	230
Eau Claire	Dist. of Nipissing O	×
Eberts	Bothwell O	×
Echo Place	Brant, N. R. O	100
Echo River	Algoma O	×
Echo Vale	Compton Q	200
Economy	Colchester N. S	359
Economy Point	Colchester N. S	×
Ecum Secum	Guysborough N. S	×
Eddystone	Northumberland, W. R. O	×
Eden	Elgin, E. R. O	150
Eden	Marquette M	×
Eden Dale	Argenteuil Q	×
Eden Grove	Bruce, E. R. O	×
Eden Mills	Wellington, S. R. O	150
Edgar	Simcoe, E. R. O	×
Edgar Mills	Essex O	×
Edge Hill	Grey, S. R. O	×
Edgeley	York, W. R. O	×
Edgeley Farm	Assa	×
Edgett's Landing	Albert N. B	×
Edgeworth	Kent O	×
Edgington	Muskoka & P. S'd O	×
Edina	Argenteuil Q	×
Edmonton	Peel O	140
Edmonton	Alta	3,000
Edmundston	Victoria N. B	907
Edwardsville	Wellington, N. R. O	×
Eel Brook	Yarmouth N. S	×
Eel Cove	Victoria N. S	×
Eel Creek	Cumberland N. S	×
Eel River Crossing	Restigouche N. B	×
Eel River Lake	York N. B	×
Eel River	Restigouche N. B	400
Effingham	Monck O	100
Eganville	Renfrew, S. R. O	500
Egbert	Simcoe, S. R. O	×
Egerton	Wellington, N. R. O	×
Egg Island	Saguenay Q	×
Eglinton	York, E. R. O	500
Egmondville	Huron, S. R. O	800
Egmont Bay	Prince P. E. I	120
Egremont	Grey, S. R. O	×
Egypte	Shefford Q	400
Elba	Cardwell O	×
Elb Mills	Leeds O	×
Elcho	Monck O	×
Elder	Cardwell O	×
Elder's Mills	York, W. R. O	×
Eldon Station	Victoria, N. R. O	×
Eldorado	Hastings, N. R. O	100
Elford	Essex, S. R. O	×
Elfrida	Wentworth, S. R. O	130
Elgin	Leeds, S. R. O	300
Elgin	Pictou N. S	×
Elgin	Albert N. B	252
Elgin	N. Westminster B. C	×
Elginburg	Frontenac O	150
Elginfield	Middlesex, E. R. O	×
Elgin Road	L'Islet Q	×
Ella	York, W. R. O	×
Elimville	Perth, S. R. O	100
Elizabethville	Durham, E. R. O	200
Elkhorn	Selkirk M	100
Ellaton	Norfolk, N. R. O	×
Ellengowan	Bruce, E. R. O	×
Ellershouse	Hants N. S	100
Ellesmere	York, E. R. O	×
Elliott	Lanark, S. R. O	×
Elliott's Mills	Queen's P. E. I	×
Elliott Vale	King's P. E. I	×
Ellisboro'	Assa	×
Ellisville	Leeds, S. R. O	150
Elm	Lanark, N. R. O	×
Elma	Dundas O	×
Elmbank	Peel O	×
Elmcroft	Charlotte N. B	×
Elmfield	Pictou N. S	×
Elmgrove	Simcoe, S. R. O	×
Elmhedge	Grey, N. R. O	×
Elmhurst	King's N. B	×
* *Elmira*	Waterloo, N. R. O	830
Elmira	King's P. E. I	×
Elmsdale	Hants N. S	200
Elmsdale	Prince P. E. I	×
Elmside	Pontiac Q	×
Elmsvale	Halifax N. S	×
Elmsville	Charlotte N. B	×
Elmvale	Simcoe, N. R. O	300
Elm Valley	Selkirk M	×
Elmwood	Bruce, E. R. O	350
Elmwood	King's N. B	×
* *Elora*	Wellington, C. R. O	1,700
Elphin	Lanark, N. R. O	×
Elsmore	Bruce, N. R. O	×
Elton	Selkirk M	×
Emberson	Muskoka & P. S'd O	×
* *Embro*	Oxford, N. R. O	1,000
Embrun	Russell O	250
Emerald	Lennox O	100
Emerald	Inverness N. S	×
* *Emerson*	Provencher M	1,400
Emery	York, W. R. O	×
Emigrant Point	Westmoreland N. B	×
Emigrant Settlement	Westmoreland N. B	×
Emileville	Bagot Q	×
Emmett	Renfrew, N. R. O	×
Emory	Yale B. C	×
Emsdale	Muskoka & P. S'd O	×
Emyvale	Queen's P. E. I	×
End of Track	Rocky Mountains	×
Enfield	Durham, W. R. O	×
Enfield	Hants N. S	150
English Bay	Gaspe Q	×
English Corner	Halifax N. S	×
English Settlement	Queen's N. B	×
English Town	Victoria N. S	525
Ennis	Cardwell O	×
Enniskillen	Durham, W. R. O	250
Enniskillen Station	Queen's N. B	100
Ennismore	Peterboro', W. R. O	×
Enon	Cape Breton N. S	×
Enterprise	Addington O	175
Epping	Grey, E. R. O	×
Epsom	Ontario, N. R. O	100
Eramosa	Wellington, S. R. O	×
Erb	King's N. B	×
Erbsville	Waterloo, N. R. O	×
Erie	Haldimand O	×
* *Erin*	Wellington, S. R. O	600
Erinsville	Addington O	100
Erinview	Lisgar M	×
Erle	Wolfe Q	×
Erinville	Guysboro' N. S	×
Ernestown Station	Lennox O	175
Escott	Leeds, S. R. O	×
Escuminac	Bonaventure Q	×
Escuminac	Northumberland N. B	×
Esdraelon	Carleton N. B	×
Eskasoni	Cape Breton N. S	×
Eskdale	Bruce, W. R. O	×
Esquesing	Halton O	×
Esquimalt	Victoria B. C	700
Esquimaux Point	Saguenay Q	×
* *Essex Centre*	Essex, S. R. O	1,700
Essonville	Peterboro', E. R. O	×
Esterhaz	Assa	×
Etang du Nord	Gaspe Q	×
Etchemin	Levis Q	×
Ethel	Huron, E. R. O	220
Etna	King's N. S	×
Ettrick	Middlesex, E. R. O	×
Eugenia	Grey, S. R. O	150
Evandale	King's N. B	×
Evansvale	Ontario, N. R. O	×
Evansville	Algoma O	×
Evelyn	Middlesex, E. R. O	×
Everett	Simcoe, S. R. O	200
Everett	Victoria N. B	×
Eversley	York, N. R. O	×
Everton	Wellington, S. R. O	300
* *Exeter*	Middlesex, N. R. O	2,000
Factory Dale	King's N. S	×
Fairbank	York, W. R. O	×
Fairburne	Selkirk M	×
Fairfield	King's P. E. I	×
Fairfield, East	Brockville O	×
Fairfield	St. John N. B	×
Fairfield Plain	Oxford, S. R. O	×
Fairhaven	Charlotte N. B	×
Fairholme	Muskoka & P. S'd O	×
Farleigh	King's N. B	×
Fairmeade	Assa	×
Fairmount	Grey, E. R. O	×
Fairmount	Marquette M	×
Fairview	Perth, S. R. O	×
Fair Valley	Simcoe, E. R. O	×
Fairview	Westmoreland N. B	×
Fairville	St. John N. B	1,500
Falding	Muskoka O	×
Falkenburg	Ontario, N. R. O	×
Falkirk	Middlesex, N. R. O	×
Falkland	Halifax N. S	×
Falkland Ridge	Annapolis N. S	×
Fallbrook	Lanark, S. R. O	100
Fallowfield	Carleton O	100
Falmouth	Hants N. S	200
False Bay Beach	Cape Breton N. S	×
Falmouth Station	Hants N. S	×
Faraday	Hastings, N. R. O	×
Farewell	Wellington, N. R. O	×
Fargo	Kent O	×
Farmerston	Carleton N. B	×
Farmersville	Leeds, S. R. O	700
Farmingdale	King's N. B	×
Farmington	King's P. E. I	×
Farmington	Cumberland N. S	×
Farnboro'	Brome Q	×
Farndon	Missisquoi Q	×
Farnham Centre	Brome Q	260
* *Farnham*	Missisquoi Q	1,880
Farquhar	Perth, S. R. O	100
Farran's Point	Stormont O	400
Fassifern	Glengarry O	×
Father Point	Rimouski Q	×
Fawcett Hill	Westmoreland N. B	×
Fawkham	Ontario, N. R. O	×
Fawn	Ontario, N. R. O	×
Fecteau's Mills	Wolfe Q	×
Fellows	Lennox O	×
Felton	Russell O	×
Fennell's	Simcoe, S. R. O	×
Fenaghvale	Prescott O	×
Fenella	Northumb., W. R. O	100
* *Fenelon Falls*	Victoria, N. R. O	1,600
Fenwick	Monck O	×
Fenwick	King's N. B	×
Fenwick	Cumberland N. S	×
* *Fergus*	Wellington C. R. O	1,700
Ferguson	Middlesex, S. R. O	100
Ferguson's Falls	Lanark, S. R. O	100
Ferguson's Point	Gloucester N. B	×
Fergusonvale	Simcoe, N. R. O	100
Fermoy	Addington O	×
Fernetville	Berthier Q	500
Ferney Coombe	Yale-Kootenay B. C	×
Fern Glen	Muskoka & P. S'd O	×
Fernhill	Middlesex, S. R. O	×
Ferry Landing	Victoria N. S	×
Ferris	Queen's N. B	×
Ferryville	Carleton N. B	×
Fesserton	Simcoe, E. R. O	100
Fetherston	Muskoka & P. S'd O	×
Feversham	Grey, E. R. O	×
Fifteen Mile Stream	Halifax N. S	×
Fifteen Point	Prince P. E. I	×
* *Fingal*	Elgin, W. R. O	1,000
Finger Board	Victoria, S. R. O	×
Fintona	Cardwell O	×
First South	Lunenburg N. S.	×
Fish Creek	Perth, S. R. O	×
Fisherville	Haldimand O	100
Fish Lake	Prince Edward O	×
Fitch Bay	Stanstead Q	250
Fitzgerald Station	Prince P. E. I	×
Fitzroy Harbour	Lanark, N. R. O	250
Five Islands	Colchester N. S	620
Five Mile River	Hants N. S	×
Flamboro' Centre	Wentworth, N. R. O	×
Flatlands	Restigouche N. B	150
Flat River	Queen's P. E. I	270
Fleetwood	Durham, E. R. O	×
Fleming	Assa	×
Flesherton	Grey, S. R. O	600
Flesherton Station	Grey, S. R. O	×
Fletcher	Kent O	100
Fletcher's Station	Halifax N. S	×
Fleurant	Bonaventure Q	×
Fleuriau	Rimouski Q	×
Flinton	Addington O	120
Flodden	Richmond Q	×
Floradale	Waterloo, N. R. O	100
Florence	Middlesex, W. R O	400
Florenceville	Carleton N. B	352
Florenceville, East	Carleton N. B	×
Florenta	Marquette M	×
Flowers' Cove	Queen's N. B	×
Flower Station	Lanark, N. R. O	×
Foley	Ontario, S. R. O	100
Folly Lake	Colchester N. S	100
Folly Mountain	Colchester N. S	100
Folly Village	Colchester N. S	400
Fontenelle	Gaspe Q	×
Fontenoy	Richmond Q	×
* *Fonthill*	Monck O	250
Forbes	Colchester N. S	×
Forbes' Point	Shelburne N. S	×
Ford's Mills	Kent N. B	×
Fordwich	Huron, E. R. O	500
Fordyce	Huron, W. R. O	×
* *Forest*	Lambton, W. R. O	2,000
Forest Farm	Assa	×
Forester's Falls	Renfrew, N. R. O	150
Forest Hill	King's P. E. I	×
Forest Lake	Muskoka & P. S'd O	×
Forest Mills	Lennox O	×
Foreston	Carleton N. B	×
Forestville	Norfolk, S. R. O	100
Forfar	Leeds, S. R. O	×
Forks	Queen's N. B	×
Forks, Baddeck	Victoria N. S	×
Forks Road	Monck O	×
Formosa	Bruce, E. R. O	500
Fort Coulonge	Pontiac Q	150
Fort Alexander	Lisgar M	×
Fort Augustus	Queen's P. E. I	×
Fort Ellice	Marquette M	×
* *Fort Erie*	Welland O	800
Fort Frances	Algoma O	200
Fortierville	Lotbiniere Q	1,000
Forties Settlement	Lunenburg N. S	×
Fortin	Rimouski Q	×
Fort Kipp	Alta	×
Fort Lawrence	Cumberland N. S	×
Fort McLeod	Alta	×
Fort Simpson	Cariboo B. C	×
Fort Pitt	Sask	×
Fort William	Pontiac Q	×
Fort William	Algoma O	200
Fort Saskatchewan	Alta	×
Foster	Brome Q	200
Foster's	Lunenburg N. S	×
Foster's Cove	Victoria N. B	×
Foster's Croft	King's N. S	×
Fosterville	York N. B	×
Fouchie	Richmond N. S	216
Four Falls	Victoria N. B	×
Four Mile Brook	Pictou N. S	×
Fournier	Prescott O	100
Fowler's Corners	Peterboro', W. R. O	×
Foxboro'	Hastings, E. R. O	300
Fox Bay	Gaspe Q	×
Fox Creek	Westmoreland N. B	500
Fox Harbour	Cumberland N. S	×
Fox Island Main	Guysboro' N. S	×
Foxmead	Simcoe, E. R. O	×
Foxton	Lisgar M	×
Fox River	Gaspe Q	510
Fox River	Cumberland N. S	×
Foymount	Renfrew, S. R O	×
Framboise	Richmond N. S	100
Frampton	Dorchester Q	400
Franconia	Monck O	×
Frankford	Hastings, W. R. O	400
Frank Hill	Victoria, S. R. O	×
Franklin	Durham, E. R O	200


Longitude West from Greenwich
79
78
77
NIPISSING DISTRICT
PAXTON
BISHOP
PRESWICK
JOLY
DEVINE
BUTT
BOWER
MC LAUGHLIN
HUNTER
MC CRANEY
CANISBAY
PECK
AIRY
MURCHISON
ROBINSON
BURNS
RICHARDS
MC KAY
FRASER
ALICE
PETAWAWA
PEMBROKE
WESTMEATH
STAFFORD
WILBERFORCE
ALGONA
HAGARTY
SHERWOOD
JONES
YELL
SABINE
NIGHTINGALE
LAWRENCE
LIVINGSTONE
FINLAYSON
ARMOUR
PROUDFOOT
BETHUNE
PERRY
CHAFFEY
SINCLAIR
MC CLINTOCK
CLYDE
EYRE
HAVELOCK
SHERBORNE
HARBURN
BRUTON
MC CLURE
WICKLOW
BANGOR
RADCLIFFE
BRUDENELL
SEBASTOPOL
GRATTAN
GRIFFITH
LYNDOCH
RAGLAN
CARLOW
MONTEAGLE
HERSCHEL
DUNGANNON
MAYO
ASHBY
DENBIGH
MATAWATCHAN
BROUGHAM
ABINGER
EFFINGHAM
CASHEL
LIMERICK
WOLLASTON
FARADAY
CARDIFF
MONMOUTH
GLAMORGAN
DUDLEY
HARCOURT
GUILFORD
STANHOPE
HINDON
MINDEN
ANSON
SNOWDON
LUTTERWORTH
STISTED
STEPHENSON
BRUNEL
FRANKLIN
RIDOUT
MC LEAN
MACAULAY
DRAPER
MUSKOKA
HALIBURTON
OAKLEY
HYDE
LONGFORD
MORRISON
RAMA
DALTON
DIGBY
LAXTON
SOMERVILLE
GALWAY
CAVENDISH
ANSTRUTHER
CHANDOS
METHUEN
BURLEIGH
HARVEY
PETERBOROUGH
VICTORIA
VERULAM
FENELON
BEXLEY
CARDEN
MARA
THORAH
ELDON
MARIPOSA
EMILY
ENNISMORE
SMITH
DOURO
DUMMER
BELMONT
MARMORA
MADOC
ELZEVIR
GRIMSTHORPE
THORPE
TUDOR
LAKE
KALADAR
KENEBEC
SHEFFIELD
HUNGERFORD
TYENDINAGA
CAMDEN
RICHMOND
HASTINGS
LENNOX AND ADDINGTON
FRONTENAC
CLARENDON
BARRIE
ASPHODEL
OTONABEE
SEYMOUR
RAWDON
HUNTINGDON
THURLOW
SIDNEY
MURRAY
PERCY
ALNWICK
HALDIMAND
CRAMAHE
BRIGHTON
HAMILTON
NORTHUMBERLAND
MONAGHAN
CAVAN
MANVERS
CARTWRIGHT
DURHAM
HOPE
CLARKE
DARLINGTON
ONTARIO
BROCK
GEORGINA
SCOTT
REACH
UXBRIDGE
PICKERING
WHITBY
MARKHAM
SCARBORO
YORK
L. SIMCOE
PR. EDWARD
AMELIASBURGH
SOPHIASBURGH
HILLIER
HALLOWELL
ATHOL
MARYSBURG
LINDSAY
PETERBORO
PORT HOPE
COBOURG
BOWMANVILLE
OSHAWA
WHITBY
TORONTO
PARKDALE
Bracebridge
L. ONTARIO
International Boundary
236 feet above the sea level
Steamboat Route
45
44
2
1
0
West
Longitude from Washington


PROVINCE OF QUEBEC
NEW YORK
PRESCOTT
RUSSELL
CARLETON
GLENGARRY
STORMONT
DUNDAS
GRENVILLE
LEEDS
LANARK
RENFREW
FRONTENAC
OTTAWA
Hull
Kingston
Brockville
Prescott
Cornwall
Ogdensburg
Watertown
Smiths Falls
Perth
Almonte
Arnprior
Hawkesbury
Black Lake
Wolfe Isl.
76
75
45
44

EASTERN PART OF ONTARIO

Geo. F. Cram, Engraver, Chicago, Ill.

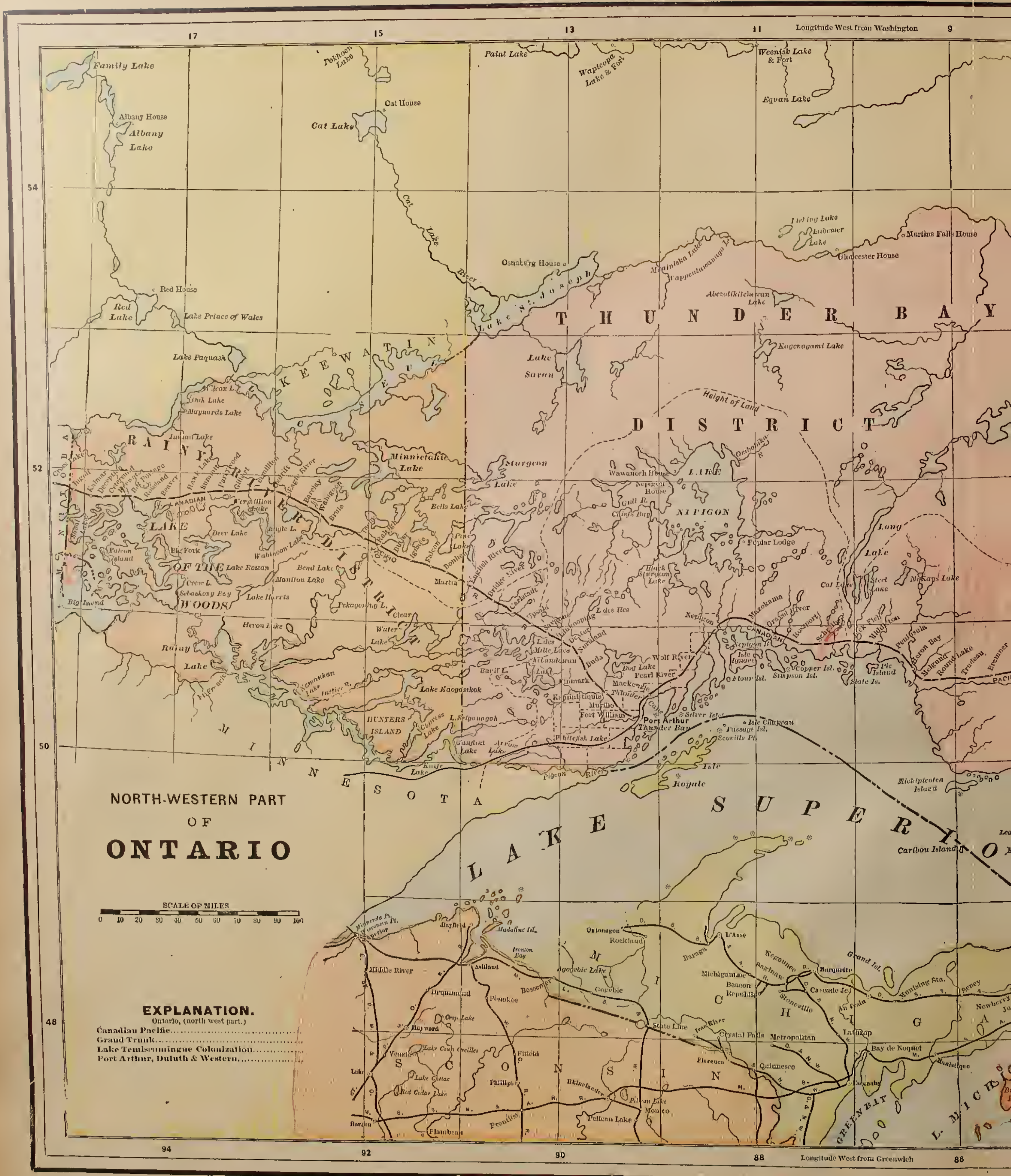
SCALE OF MILES

LIST OF POST OFFICES IN CANADA.

POST OFFICE.	ELECTORAL DISTRICT.	POP.
Franklin Centre	Huntingdon ... Q	350
Franktown	Lanark, S. R. ... O	110
Frankville	Brockville ... O	250
Fraserburg	Ontario, N. R. ... O	150
Fraser's Grant	Antigonishe ... N. S	×
Fraser's Mills	Antigonishe ... N. S	×
Frazerville	Peterboro', W. R. ... O	×
Frechette	Levis ... Q	×
Fredericton	York ... N. B	6,502
Fredericton Junction	Sunbury ... N. B	×
Fredericton Road	Westmoreland ... N. B	×
Fredericton Station	Queen's ... P. E. I	×
Freeborn	Perth, N. R. ... O	×
Freeland	Leeds, S. R. ... O	×
Freeland	Prince ... P. E. I	×
Freelton	Wentworth, N. R. ... O	250
Freeman	Halton ... O	150
Freeport	Digby ... N. S	700
Freeport	Waterloo, S. R. ... O	150
Freetown	Prince ... P. E. I	150
* *Frelighsburg*	Missisquoi ... Q	600
French Bay	Bruce, N. R. ... O	×
French Creek	Vancouver ... B. C	×
French Lake	Sunbury ... N. B	150
French River	Pictou ... N. S	×
French River	Queen's ... P. E. I	100
French River	Algoma ... O	×
French Road	Cape Breton ... N. S	×
Frenchvale	Cape Breton ... N. S	×
French Village	Drummond ... Q	×
French Village	Queen's ... P. E. I	×
French Village	King's ... N. B	×
French Village	Halifax ... N. S	×
Friar's Head	Inverness ... N. S	×
Frogmore	Norfolk, S. R. ... O	×
Frome	Elgin, W. R. ... O	×
Frontier	Huntingdon ... Q	×
Frost Village	Shefford ... Q	200
Fulford	Brome ... Q	200
Fullarton	Perth, S. R. ... O	×
Fuller	Hastings, N. R. ... O	×
Fulton	Wentworth, S. R. ... O	100
Fulton Brook	Queen's ... N. B	×
Furnace Falls	Victoria, N. R. ... O	×
Fyfield	Bruce, E. R. ... O	×
Gabarouse Lake	Richmond ... N. S	×
Gabarouse	Cape Breton ... N. S	,750
Gabriola Island	Vancouver ... B. C	×
Gad's Hill	Perth, N. R. ... O	100
Gagetown	Queen's ... N. B	1,282
Gagnon	Victoria ... N. B	×
Galley	Kent ... N. B	×
Galbraith	Lanark, N. R. ... O	×
Galetta	Lanark, N. R. ... O	×
Gallingertown	Stormont ... O	×
Galson	Compton ... Q	×
* *Galt*	Waterloo, S. R. ... O	7,535
Gamebridge	Ontario, N. R. ... O	×
* *Gananoque*	Leeds, S. R. ... O	2,856
Garden Hill	Durham, E. R. ... O	×
Garden Island	Frontenac ... O	500
Garden of Eden	Pictou ... N. S	100
Garden River	Algoma ... O	×
Gardiner Mines	Cape Breton ... N. S	×
Gardner's Creek	St. John ... N. B	200
Garfield	Queen's ... P. E. I	×
Garland	Chateauguay ... Q	×
Garneau	L'Islet ... Q	450
Garnet	Haldimand ... O	100
Garnet	St. John ... N. B	×
Garretton	Grenville, S. R. ... O	×
Garrison Road	Welland ... O	×
Garryowen	Grey, N. R. ... O	×
Garthby Station	Wolfe ... Q	800
* *Gaspe Basin*	Gaspe ... Q	820
Gaspe Bay South	Gaspe ... Q	×
Gaspereaux	King's ... P. E. I	×
Gaspereaux	Queen's ... N. B	×
Gaspereaux	King's ... N. S	208
Gasperaux Station	Queen's ... N. B	×
Gauthier	Provencher ... M	×
Gavelton	Yarmouth ... N. S	..
Gay's River	Colchester ... N. S	350
Gaythorne	Northumberland ... N. B	×
Gay's River Road	Halifax ... N. S	×
Geary	Sunbury ... N. B	×
Gelert	Victoria, N. R. ... O	×
Geneva	Argenteuil ... Q	150
Genoa	Argenteuil ... Q	×
Gentilly	Nicolet ... Q	250
George's River	Cape Breton ... N. S	×
Georgetown	King's ... P. E. I	1,120
* *Georgetown*	Halton ... O	1,620
Georgeville	Stanstead ... Q	260
Georgeville	Antigonishe ... N. S	×
Georgina Island	York, N. R. ... O	×
Geraldine	Huntingdon ... Q	×
Germania	Ontario, N. R. ... O	×
German Mills	Waterloo, S. R. ... O	×
Germantown	Albert ... N. B	×
Gesto	Essex, S. R. ... O	×
Getson's Point	Lunenburg ... N. S	200
Giant's Lake	Guysborough ... N. S	×
Gibraltar	Grey, E. R. ... O	×
Gibson	Simcoe, E. R. ... O	×
Gilbert Cove	Digby ... N. S	225
Gilbert's Mills	Prince Edward ... O	×
Gilford	York, N. R. ... O	100
Gill	Haldimand ... O	×
Gillander's Mountain	Victoria ... N. S	×
Gillespie	Victoria ... N. B	×
Gillies Hill	Bruce, N. R. ... O	×
Gillies Lake	Cape Breton ... N. S	×
Gillies Point	Victoria ... N. S	×
Gillies Point East	Victoria ... N. S	×
Gimli	Lisgar ... M	200
Giroux	Provencher ... M	×
Gladstone	Middlesex, E. R. ... O	×
Gladstone	Victoria ... N. B	750
Gladstone	Marquette ... M	1,000
Glammis	Bruce, W. R. ... O	200
Glamorgan	Durham, E. R. ... O	×
Glandine	Victoria, S. R. ... O	×
Glanford	Wentworth, S. R. ... O	×
Glanmire	Hastings, N. R. ... O	×
Glanworth	Middlesex, S. R. ... O	150
Glascott	Grey, S. R. ... O	×
Glasgow	Ontario, W. R. ... O	×
Glassville	Carleton ... N. B	200
Glastonbury	Addington ... O	×
Gleichen	... Alta	×
Glen Adelaide	... Assa	×
Glen Alda	Peterboro', E. R. ... O	×
* *Glen Allan*	Wellington, C. R. ... O	400
Glen Almond	Ottawa ... Q	×
Glen Alpine	Antigonishe ... N. S	×
Glen Anglin	Gloucester ... N. B	×
Glenannan	Huron, E. R. ... O	×
Glenarm	Victoria, N. R. ... O	×
Glen Bean	Ottawa ... Q	×
Glen Bard	Antigonishe ... N. S	×
Glen Becker	Dundas ... O	×
Glenbervie	Colchester ... N. S	×
Glen Buell	Brockville ... O	×
Glenboro'	Marquette ... M	×
Glenburnie	Frontenac ... O	×
Glencairn	Simcoe, S. R. ... O	125
Glencoe	Middlesex, W. R. ... O	1,500
Glencoe	Inverness ... N. S	×
Glencoe	Restigouche ... N. B	×
Glen Cove	Guysboro' ... N. S	×
Glen Colin	Elgin, E. R. ... O	×
Glencorradale	King's ... P. E. I	×
Glen Donald	Glengarry ... O	×
Glendale	Inverness ... N. S	×
Glendale	Middlesex, E. R. ... O	×
Glendale	Marquette ... M	×
Glendinning	Selkirk ... M	×
Glendyer	Inverness ... N. S	×
Gleneden	Grey, S. R. ... O	×
Glenelg	Guysboro' ... N. S	150
Glenfinnan	King's ... P. E. I	×
Glen Farnham	Brome ... Q	×
Glen Farrow	Huron, E. R. ... O	×
Glengarry	Inverness ... N. S	150
Glengarry Road	Cape Breton ... N. S	×
Glengarry Station	Pictou ... N. S	×
Glen Huron	Simcoe, N. R. ... O	150
Glen Huron Station	Simcoe, N. R. ... O	×
Glenila	Muskoka & P. S'd ... O	×
Glen Iver	Sherbrooke ... Q	×
Glenlivet	Ottawa ... Q	×
Glenlivet	Restigouche ... N. B	×
Glen Lloyd	Megantic ... Q	×
Glen Major	Ontario, W. R. ... O	100
Glen Margaret	Halifax ... N. S	100
Glen Meyer	Norfolk, S. R. ... O	×
Glen Millar	Hastings, W. R. ... O	100
Glenmore	Grenville, S. R. ... O	×
Glen Morris	Brant, N. R. ... O	300
Glen Murray	Megantic ... Q	200
Glennevis	Glengarry ... O	×
Glen Norman	Glengarry ... O	×
Glenora	Selkirk ... M	×
Glen Orchard	Simcoe, E. R. ... O	×
Glen Porter	Northumberland ... N. B	×
Glen Road	Antigonishe ... N. S	×
Glen Robertson	Glengarry ... O	300
Glen Ross	Hastings, W. R. ... O	×
Glenroy	Glengarry ... O	×
Glen Sandfield	Glengarry ... O	×
Glen Oak	Middlesex, S. R. ... O	×
Glenshee	Norfolk, S. R. ... O	×
Glenshee	Pictou ... N. S	×
Glen Small	Grenville, S. R. ... O	×
Glen Stewart	Dundas ... O	×
Glen Sutton	Brome ... Q	400
Glen Tay	Lanark, S. R. ... O	200
Glen Uig	Antigonishe ... N. S	×
Glenvale	Frontenac ... O	×
Glenvale	Westmoreland ... N. B	×
Glenville	Inverness ... N. S	×
Glen Walter	Glengarry ... O	×
Glen William	King's ... P. E. I	×
Glen Williams	Halton ... O	500
Glen Willow	Middlesex, W. R. ... O	×
Glenwood	Yarmouth ... N. S	×
Golde's Corners	Brant, N. R. ... O	×
Godbout	Saguenay ... Q	×
* *Goderich*	Huron, W. R. ... O	3,930
Godfrey	Addington ... O	×
Godolphin	Northumberl'd, E. R. ... O	×
Goff	Halifax ... N. S	×
Golden Grove	St. John ... N. B	×
Golden Grove Mills	St. John ... N. B	×
Golden Lake	Renfrew, N. R. ... O	×
Golden Ridge	Carleton ... N. B	×
Golden Stream	Marquette ... M	×
Goldenville	Guysborough ... N. S	1,000
Goldfield	Stormont ... O	×
Gold River	Lunenburg ... N. S	×
Goldsmith	Essex, S. R. ... O	×
Goldstone	Wellington, C. R. ... O	×
Goldstream	Victoria ... B. C	×
Gondola Point	King's ... N. B	×
Gonor	Lisgar ... M	×
Good Corner	Carleton ... N. B	×
Gooderham	Peterboro', E. R. ... O	×
Goodstown	Carleton ... O	×
Goodwood	Ontario, W. R. ... O	300
Gooseberry Cove	St. John ... N. B	×
Goose Creek	St. John ... N. B	×
Goose River	King's ... P. E. I	×
Gordon	Essex, S. R. ... O	×
Gordonsville	Carleton ... N. B	×
Gordonville	Wellington, N. R. ... O	×
Gore	Hants ... N. S	200
Gore Bay	Algoma ... O	400
Gore's Landing	Northumberl'd, W. R. ... O	112
Goring	Grey, E. R. ... O	×
Gormley	York, E. R. ... O	×
Gorrie	Huron, E. R. ... O	550
Goshen	Albert ... N. B	×
Goshen	Guysboro' ... N. S	100
Gosport	Lennox ... O	×
Gould	Compton ... Q	200
Gould Station	Compton ... Q	×
Goulais Bay	Algoma ... O	×
Gourock	Wellington, S. R. ... O	×
Gowan Brae	Kings ... P. E. I	×
Gowanstown	Wellington, N. R. ... O	100
Gower Point	Renfrew, N. R. ... O	×
Gowland Mountain	Albert ... N. B	×
Gowrie	Perth, S. R. ... O	×
Gracefield	Ottawa ... Q	×
Grafton	Northumb., W. R. ... O	400
Grafton	Carleton ... N. B	150
Grafton	King's ... N. S	210
Graham's Road	Queen's ... P. E. I	×
Grahamsville	Peel ... O	100
Grainfield	Northumb. ... N. B	×
Granboro'	Shefford ... Q	×
Granby	Shefford ... Q	1,600
Grand Anse	Richmond ... N. S	×
Grande Anse	Gloucester ... N. B	705
Grand Bay	King's ... N. B	×
Grand Bend	Lambton, E. R. ... O	300
Grande Baie	Chicoutimi ... Q	×
Grand Cascapedia	Bonaventure ... Q	×
Grande Freniere	Two Mountains ... Q	×
Grande Greve	Gaspe ... Q	100
Grande Ligne	St. John's ... Q	400
Grand Entry	Gaspe ... Q	×
Grande Prairie	Yale-Kootenay ... B. C	×
Grandes Piles	Champlain ... Q	×
Grandes Coudees	Beauce ... Q	×
Grand Etang	Inverness ... N. S	×
Grande Vallee	Gaspe ... Q	300
* *Grand Falls*	Victoria ... N. B	500
Grand Falls Portage	Victoria ... N. B	×
Grand Harbor	Charlotte ... N. B	×
Grandigue	Kent ... N. B	×
Grandigue Ferry	Richmond ... N. S	200
Grandin	... Sask	×
Grand Lake Station	Halifax ... N. S	×
Grand Manan	Charlotte ... N. B	2,700
Grand Metis	Rimouski ... Q	×
Grand Mira, North	Cape Breton ... N. S	×
Grand Mira, South	Cape Breton ... N. S	×
Grand Narrows, R.	Victoria ... N. S	×
Grand Narrows, S	Cape Breton ... N. S	×
Grand Narrows	Victoria ... N. S	107
Grand Pabos	Gaspe ... Q	200
Grand Pre	King's ... N. S	700
Grand River	Gaspe ... Q	3,000
Grand River	Victoria ... N. B	×
Grand River	Richmond ... N. S	100
Grand St. Esprit	Nicolet ... Q	×
Grand Tracadie	Queen's ... P. E. I	×
Grand Valley	Wellington ... O	200
Grandview	Queen's ... P. E. I	×
Grange	Selkirk ... M	×
Granger	Cardwell ... O	×
Granite Hall	Muskoka ... O	×
Granite Creek	Yale-Kootenay ... B. C	400
Grant	Russell ... O	×
Grant	Westmoreland ... N. B	×
Grantley	Dundas ... O	×
* *Granton*	Middlesex, N. R. ... O	300
Granton	Pictou ... N. S	200
Granville	Queen's ... P. E. I	×
Granville Centre	Annapolis ... N. S	×
Granville Ferry	Annapolis ... N. S	315
Grassmere	Muskoka & P. S'd ... O	×
Grassy's Corners	Wentworth, S. R. ... O	×
Grattan	North' ... N. B	×
Grattan	Renfrew, S. R. ... O	×
Gravel Hill	Stormont ... O	×
* *Gravenhurst*	Simcoe, E. R. ... O	1,800
Graystock	Peterboro', E. R. ... O	×
Great Shemogue	Westmoreland ... N. B	302
* *Great Village*	Colchester ... N. S	1,600
Greely	Russell ... O	×
Greenbank	Ontario, N. R. ... O	×
Green Bay	Algoma ... O	×
Greenbush	Brockville ... O	100
Greenbush	York ... N. B	×
Green Cove	Victoria ... N. S	×
Greendale	Antigonishe ... N. S	×
Greenfield	Glengarry ... O	150
Greenfield	Carleton ... N. B	×
Greenfield	Queen's ... N. S	200
Greenfield	Colchester ... N. S	×
Greenfield, St. Marys	Guysboro' ... N. S	×
Green Hill	Pictou ... N. S	200
Green Hill	Cumberland ... N. S	×
Greenock	Bruce, E. R. ... O	×
Green Point	Prince Edward ... O	×
Green Point	Gloucester ... N. B	×
Green Point Station	York ... N. B	×
Green Ridge	Provencher ... M	×
Green River	Temiscouata ... Q	×
Green River	Ontario, W. R. ... O	×
Green River	Victoria ... N. B	700
Green's Brook	Pictou ... N. S	×
Green's Creek	Colchester ... N. S	×
Greenside	Grey, S. R. ... O	×
Greensville	Wentworth, N. R. ... O	×
Green Valley	Glengarry ... O	×
Greenview	Hastings, N. R. ... O	×
Greenville	Cumberland ... N. S	×
Greenville Station	Cumberland ... N. S	×
Greenway	Middlesex, N. R. ... O	×
Greenwich	King's ... P. E. I	×
Greenwich Hill	King's ... N. B	150
Greenwood	Lisgar ... M	×
Greenwood	King's ... N. S	×
Greenwood	Ontario, W. R. ... O	300
Greer	St. John ... N. B	×
Greer Mount	Pontiac ... Q	×
Gregory	Simcoe, R. ... O	×
Grenfel	Simcoe, N. R. ... O	×
Grenfell	Assiniboia	×
* *Grenville*	Argenteuil ... Q	600
Gresham	Bruce, W. R. ... O	×
Gretna	Provencher ... M	×
Grey Eagle	Muskoka & P. S'd ... O	×
Gretna	Lennox ... O	×
Greystead	Middlesex, S. R. ... O	×
Grey's Mills	King's ... N. B	×
Greywood	Annapolis ... N. S	×
Griersville	Grey, E. R. ... O	×
Grildun	Peel ... O	×
Griffin's Corners	Elgin, E. R. ... O	×
Griffin Cove	Gaspe ... Q	×
Griffith	Renfrew, S. R. ... O	×
* *Grimsby*	Wentworth, S. R. ... O	900
Grimsby Park	Wentworth, S. R. ... O	×
Grimston	Grey, N. R. ... O	×
Grindstone Island	Gaspe ... Q	2,000
Griswold Station	Selkirk ... M	×
Groudines	Portneuf ... Q	500
Grosses Coques	Digby ... N. S	500
Grosses Roches	Rimouski ... Q	×
Grosvenor	Guysboro' ... N. S	×
Grovesend	Elgin, E. R. ... O	×
Grove Mills	Bothwell ... O	×
Groves Point	Cape Breton ... N. S	×
Groveton	Grenville, S. R. ... O	×
Grund	Selkirk ... M	×
Gueguen	Kent ... N. B	×
* *Guelph*	Wellington, S. R. ... O	10,800
Guignes	Ottawa ... Q	×
Guilds	Kent ... O	×
Gulf Shore	Cumberland ... N. S	×
Gull Cove	Cape Breton ... N. S	×
Gull Creek	Addington ... O	×
Gunning Cove	Shelburne ... N. S	160
Gunter	Hastings, N. R. ... O	×
Guthrie	Simcoe, E. R. ... O	×
Guysborough	Norfolk, N. R. ... O	200
Guysborough	Guysboro' ... N. S	1,000
Guysboro' Intervale	Guysboro' ... N. S	×
Gypsum Mines	Haldimand ... O	×
Hackett's Cove	Halifax ... N. S	×
Hadlow Cove	Levis ... Q	×
* *Hagersville*	Haldimand ... O	1,000
Hagerman's Corners	York, E. R. ... O	150
Hainsville	Dundas ... O	×
Hainsville	Digby ... N. S	×
Hayley Station	Renfrew, N. R. ... O	×
Halcomb	Northumberland ... N. B	×
Haldane Hill	Muskoka & P. S'd ... O	×
Half Island Cove	Guysboro' ... N. S	100
Halfway Cove	Guysboro' ... N. S	×
Halfway Brook	Colchester ... N. S	×
Halfway River	Cumberland ... N. S	×
Halfway River St.	Cumberland ... N. S	×
* *Haliburton*	Peterboro', E. R. ... O	400
* *Halifax*	Halifax ... N. S	38,556
Hallerton	Huntingdon ... Q	150
Halloway	Hastings, E. R. ... O	×
Hallowell Grant	Antigonishe ... N. S	×
Hall's Bridge	Peterboro', W. R. ... O	150
Hall's Glen	Peterboro', E. R. ... O	×
Hall's Harbour	King's ... N. S	150
Hall's Mills	Lanark, N. R. ... O	×
Hall's Prairie	N. Westminster ... B. C	×
Hall's Stream	Compton ... Q	×
Hallville	Dundas ... O	×
Halverson	Pontiac ... Q	×
* *Hamilton*	Hamilton ... O	48,980
Hamilton	Prince ... P. E. I	×
Hamilton Cove	Saguenay ... Q	×
Hamilton Mountain	Queen's ... N. B	×
Hamiota	Marquette ... M	×
Hammond	Perth, N. R. ... O	×
Hammondvale	King's ... N. B	200
Hampshire Mills	Simcoe, E. R. ... O	×
Hampstead	Oxford, N. R. ... O	×
Hampstead	Queen's ... N. B	250
Hampden	Grey, S. R. ... O	×
Hampton	Durham, W. R. ... O	850
Hampton	Queen's ... P. E. I	×
Hampton	King's ... N. B	2,000
Hamtown	York ... N. B	×
Hanlan	Peel ... O	×
Hanlan	Lisgar ... M	×
Hannon	Wentworth, S. R. ... O	×
Hanover	Grey, S. R. ... O	1,400
Hansford	Cumberland ... N. S	×
* *Hantsport*	Hants ... N. S	900
Hanwell	York ... N. B	×
Harbour au Bouche	Antigonishe ... N. S	700
Harbour Road	Antigonishe ... N. S	×
Harbourville	King's ... N. S	250
Harcourt	Renfrew, S. R. ... O	×
Hardinge	Addington ... O	×
Hardingville	St. John ... N. B	×
Hardwicke	Northumberland ... N. B	×
Hardwood Flat	Compton ... Q	×
Hardwood Lands	Hants ... N. S	×
Harewood	Westmoreland ... N. B	×
Harkaway	Grey, E. R. ... O	×
Harlem	Leeds, S. R. ... O	175
Harley	Oxford, S. R. ... O	200
Harley Road	Queen's ... N. B	×
Harlock	Huron, S. R. ... O	×
Harlowe	Addington ... O	×
Harmony	King's ... N. S	×
Harmony	Oxford, N. R. ... O	×
Harmony Mills	Queen's ... N. S	×
Harold	Hastings, N. R. ... O	×
Harper	Lanark, S. R. ... O	×
Harpley	Middlesex, N. R. ... O	200
Harrietsville	Middlesex, E. R. ... O	200
Harrigan Cove	Halifax ... N. S	×
Harrington, East	Argenteuil ... Q	100
Harrington, West	Oxford, N. R. ... O	×
Harrisburg	Brant, N. R. ... O	300
Harrison's Corners	Cornwall ... O	×
Harrison River	N. Westminster ... B. C	200
Harrison Settlement	Cumberland ... N. S	×
* *Harriston*	Wellington, N. R. ... O	2,000
Harrow	Essex, S. R. ... O	150
Harrowsmith	Addington ... O	300
Hartfell	Muskoka & P. S'd ... O	×
Hartford	Norfolk, N. R. ... O	200
Hartford	Cumberland ... N. S	×
Hartford	Carleton ... N. B	×
Hartington	Addington ... O	×
Hartland	Carleton ... N. B	405
Hartley	Victoria, N. R. ... O	×
Hartney	Selkirk ... M	×
Hartsmere	Addington ... O	100
Hartsville	Queen's ... P. E. I	×
Harty's Station	Renfrew, S. R. ... O	×
Harvey	Albert ... N. B	1,800
Harvey Bank	Albert ... N. B	×
Harvey Creek	Cariboo ... B. C	×
Harvey Station	York ... N. B	200
Harvey Hill Mines	Megantic ... Q	×
Harwich	Kent ... O	×
Harwood	Northumberl'd, W. R. ... O	500
[illegible]	Missisquoi ... Q	×
Hassett	Digby ... N. S	×
* *Hastings*	Northumberl'd, E. ... O	950
Hastings	Cumberland ... N. S	×
Hastings	Albert ... N. B	×
Hatchley Station	Oxford, S. R. ... O	×
Hatfield Point	King's ... N. B	×
Hatley	Stanstead ... Q	150
[illegible]	Pontiac ... Q	×
Haultain	Peterboro', E. R. ... O	×
Havelock	Peterboro', E. R. ... O	100
Havelock	Digby ... N. S	×
Havergal	Hastings, N. R. ... O	×
* *Hawkesbury*	Prescott ... O	2,000
Hawkestone	Simcoe, E. R. ... O	150
Hawkesville	Waterloo, N. R. ... O	250
Hawley	Lennox ... O	×
Hawthorne	Russell ... O	150
Hawtrey	Oxford, S. R. ... O	150
Hay	Middlesex, N. R. ... O	×
Hay Bay	Lennox ... O	×
Hay Cove	Richmond ... N. S	×
Haydon	Durham, W. R. ... O	150
Hayesland	Wentworth, N. R. ... O	×
Hayfield	Selkirk ... M	×
Hay's River	Inverness ... N. S	×
Haysville	Waterloo, S. R. ... O	200
Hayward	... Assa	×
Hazeldean	Carleton ... O	×
Hazel Green	King's ... P. E. I	×
Hazel Grove	Queen's ... P. E. I	×
Hazel Hill	Guysboro' ... N. S	×
Hazelwood	Selkirk ... M	×
Headford	York, E. R. ... O	×
Headingly	Lisgar ... M	100
Head Lake	Victoria, N. R. ... O	×
Head of Amherst	Cumberland ... N. S	×
Head of Cardigan	King's ... P. E. I	×
Head of Chezzetcook	Halifax ... N. S	×
Head of Hillsboro	King's ... P. E. I	×
Head Ind. Har. Lake	Guysborough ... N. S	×
Head of Jeddore	Halifax ... N. S	×
Head of Jordan River	Shelburne ... N. S	×
Head of Millstream	King's ... N. B	×
Head of River Hebert	Cumberland ... N. S	×
Head St. Margaret's Bay	Halifax ... N. S	300
Head of St. Mary's Bay	Digby ... N. S	×
Head of St. Peter's Bay	King's ... P. E. I	400
Head South River Lake	Antigonishe ... N. S	×
Head Tatmagouche B.	Colchester ... N. S	×
Head of Tide	Restigouche ... N. B	×
Head of Wallace Bay	Cumberland ... N. B	×

LIST OF POST OFFICES IN CANADA.

POST OFFICE.	ELECTORAL DISTRICT.	POP.
H. Wallace B. (N. Side)	Cumberland N. S	×
Heaslip	Selkirk M	×
Heathbell	Pictou N. S	×
Heather	Lambton, E. R. O	×
Heatherton	Antigonishe N. S	400
Heathcote	Gray, E. R. O	150
Hebb's Cross	Lunenburg N. S	×
Hebron	Albert N. B	×
Hebron	Yarmouth N. S	500
Heckston	Grenville, N. R. O	107
Hedleyville	Quebec Q	×
Heidelburg	Waterloo, N. R. O	×
Helena	Huntingdon Q	400
Hemford	Lunenburg N. S	×
Hemison	Dorchester Q	×
Hemlock	Norfolk, S. R. O	×
Hemmingford	Huntingdon Q	600
Henderson Settlement	Queen's N. B	×
Henderson Settlement	Cumberland N. S	×
Henesy	Pontiac Q	×
Henfryn	Huron, E. R. O	100
Hendrick	Middlesex, S. R. O	×
Hennigar	Hants N. S	×
Henry	Prescott O	×
Henry's Lake	St. John N. B	×
Henrysburg	St. John's Q	×
Henryville	Iberville Q	600
Hensall	Huron, S. R. O	350
Hepworth	Grey, N. R. O	100
Herdman	Huntingdon Q	×
Hereford	Compton Q	×
Hereward	Wellington, C. R. O	×
Hermon	Hastings, N. R. O	125
Hermanville	King's P. E. I	×
Hernefield	Selkirk M	×
Heron Island	Restigouche N. B	×
Herring Cove	Halifax N. S	×
* *Hespeler*	Waterloo, S. R. O	1,100
Hesson	Perth, N. R. O	×
Hewitt	Monck O	×
Heyworth	Ottawa Q	×
Hiawatha	Peterboro', E. R. O	×
Hibernia	Queen's N. B	×
Hickson	Oxford, N. R. O	×
Higgin's Road	Prince P. E. I	×
High Bank	King's P. E. I	×
High Bluff	Marquette M	200
Highbury	King's N. S	×
High Falls	Renfrew, S. R. O	×
Highfield	York, W. R. O	×
Highfield	Hants N. S	×
Highgate	Elgin, W. R. O	300
Highland Creek	York, E. R. O	200
Highland Village	Colchester N. S	×
Highlands	Carleton N. B	×
High River	Alta	×
High Rock	Ottawa Q	×
Hillandale	Victoria N. B	×
Hillburn	Assa	×
Hill Head	Argenteuil Q	×
Hillhurst	Compton Q	×
Hillier	Prince Edward O	200
Hillman	Essex, S. R. O	×
Hillsborough	Lambton, W. R. O	×
Hillsborough	Inverness N. S	×
Hillsborough	Albert N. B	900
Hillsburgh	Wellington, S. R. O	375
Hillsdale	Simcoe, E. R. O	450
Hillsdale	King's N. B	×
Hill's Green	Huron, S. R. O	×
Hillside	Cape Breton N. S	×
Hillside	Albert N. B	×
Hillview	Selkirk M	×
Hilly Grove	Algoma O	×
Hilton	Northumberland, E. R. O	120
Hinch	Addington O	×
Hintonburg	Carleton O	×
Hiram	Albert N. B	×
Hoard's Station	Northumberland, E. R. O	105
Hoasic	Dundas O	×
Hoath Head	Grey, N. R. O	×
Hobart	Simcoe, E. R. O	1,600
* *Hochelaga*	Hochelaga Q	×
Hochstadt	Provencher M	×
Hockley	Cardwell O	×
Hodson	Pictou N. S	100
Holbrook	Oxford, S. R. O	×
Holderville	King's N. B	100
Holland Center	Grey, N. R. O	×
Holland Harbour	Guysboro' N. S	700
Holland Landing	York, N. R. O	×
Holland	Marquette M	×
Holland's Mills	Ottawa Q	×
Hollbroke	Alta	500
Hollen	Wellington, N. R. O	×
Holly	Simcoe, S. R. O	×
Holly Park	York, N. R. O	⊙
Holmes' Mills	Queen's P. E. I	×
Holmesville	Carleton N. B	×
Holmfield	Selkirk M	×
Holmesville	Huron, S. R. O	200
Holstein	Grey, S. R. O	×
Holt	York, N. R. O	×
Holton	Chateauguay Q	×
Holyrood	Bruce, W. R. O	150
Homer	Lincoln O	×
Honeywood	Simcoe, S. R. O	×
Hoodstown	Muskoka & P. S'd O	200
Hope	Yale B. C	×
Hope Bay	Bruce, N. R. O	700
Hopefield	Renfrew, S. R. O	×
Hopefield	King's P. E. I	×
Hope Ness	Bruce, N. R. O	130
Hope River	Queen's P. E. I	800
Hopetown	Bonaventure Q	×
Hopetown	Lanark, N. R. O	150
Hopeville	Grey, E. R. O	150
Hopewell	Albert N. B	200
Hopewell	Pictou N. S	×
Hopewell Cape	Albert N. B	500
Hopewell Hill	Albert N. B	×
Hopper	Albert N. B	200
Hornby	Halton O	×
Horncastle	Victoria, N. R. O	300
Horning's Mills	Grey, E. R. O	×
Hornsey	Cumberland N. S	×
Horn's Road	Cape Breton N. S	200
Horton Landing	King's N. S	×
Hotspur	Peterboro' E. R. O	×
Houghton	Norfolk, S. R. O	×
House Harbour	Gaspe Q	×
Housey's Rapids	Ontario, N. R. O	×
Howe Island	Frontenac O	200
Howick	Chateauguay Q	×
Hyt Station	Sunbury N. B	350
Hubbard's Cove	Halifax N. S	400
Hudson	Vaudreuil Q	×
Huestis Landing	Queen's N. B	×
Huffman	Kent O	
* *Hull*	Ottawa Q	11,265
Humber	York, W. R. O	×
* *Humberstone*	Welland O	400
Hunter's Home	Queen's N. B	×
Hunter's Mountain	Victoria N. S	×
Hunter's River	Queen's P. E. I	250
Hunterstown	Maskinonge Q	300
* *Huntingdon*	Huntingdon Q	1,000
Huntingfield	Huron, E. R. O	×
Huntington	Cape Breton N. S	×
Huntingville	Sherbrooke Q	250
Huntley	Lanark, N. R. O	×
Hunt's Point	Queen's N. S	×
* *Huntsville*	Muskoka & P. S'd O	1,000
Hurdville	Muskoka & P. S'd O	×
Huston	Wellington, C. R. O	100
Hutchinson Settle't	Halifax N. S	×
Huttonsville	Peel O	100
Hybla	Hastings, N. R. O	×
Hyde Park Corner	Middlesex, E. R. O	200
Hyndman	Grenville O	×
Icelandic River	Lisgar M	×
Ida	Durham, E. R. O	×
Ida	Queen's N. B	×
Ignace	O	×
Ilfracombe	Muskoka & P. S'd O	×
Ilderton	Middlesex, E. R. O	×
Inlah	King's N. B	×
Inchby	Queen's N. B	×
Indian Brook	Victoria N. S	×
Indian Ford	Marquette M	×
Indian Harbour	Halifax N. S	150
Indian Head	Assa	200
Indian Island	Charlotte N. B	×
Indian Mountain	Westmoreland N. B	×
Indian Point	Lunenburg N. S	×
Indian River	Peterboro', E. R. O	200
Indian River	Prince P. E. I	×
Indian Road	Hants N. S	×
* *Indian Town*	St. John N. B	2,500
* *Ingersoll*	Oxford, S. R. O	4,500
Inglewood	Cardwell O	100
Inglisville	Annapolis N. S	×
Ingoldsby	Victoria, N. R. O	×
Ingonish	Victoria N. S	200
Ingram River	Halifax N. S	×
Inholmes	Muskoka & P. S'd O	×
Inistoge	Grey, E. R. O	260
Inkerman	Dundas O	250
Inkerman	Gloucester N. B	×
Innerkip	Oxford, N. R. O	200
Innisfil	Simcoe, S. R. O	×
Innisville	Lanark, S. R. O	200
International Bridge	Welland O	400
Intervale	Westmoreland N. B	×
Inverary	Frontenac O	125
Inverhaugh	Wellington, C. R. O	×
Inverhuron	Bruce, W. R. O	100
Invermay	Bruce, N. R. O	200
* *Inverness*	Megantic Q	600
Inverness	Prince P. E. I	×
Inwood	Lambton, E. R. O	300
Iona	Elgin, W. R. O	200
Iona Station	Elgin, W. R. O	×
Irena	Dundas O	×
Ireton	Yarmouth N. S	×
Irish Cove	Cape Breton N. S	300
Iris	Simcoe, N. R. O	×
Iris	Queen's P. E. I	×
Irishtown	Westmoreland N. B	×
Iron Dale	Victoria, N. R. O	×
Iron Hill	Brome Q	300
Iron Mines	Inverness N. S	×
Iron Ore	Pictou N. S	×
Ironside	Ottawa Q	300
* *Iroquois*	Dundas O	1,500
Irvine	Megantic Q	×
Irving Settlement	Albert N. B	×
Irwin	Kent O	×
Isaac's Harbour	Guysboro' N. S	400
Isaac's Harbour (e. s.)	Guysboro' N. S	×
Island Brook	Compton Q	×
Islay	Victoria, N. R. O	×
Isle aux Coudres	Charlevoix Q	×
Isle aux Grues	Montmagny Q	600
Isle Bizard	Jaques Cartier Q	800
Isle Dupas	Berthier Q	×
Isle Perrot	Vaudreuil Q	100
Isle Perrot, North	Vaudreuil Q	×
Isle Verte	Temiscouata Q	1,000
Islington	York, W. R. O	150
Ivan	Middlesex, S. R. O	×
Ivanhoe	Hastings, S. R. O	×
Ivy	Simcoe, S. R. O	100
Jackson	Cumberland N. S	×
Jackson	Grey, N. R. O	×
Jackson Road	King's N. S	×
Jacksontown	Carleton N. B	200
Jacksonville	Carleton N. B	300
Jacksonville	Cape Breton N. S	×
Jacquet River	Restigouche N. B	×
Jaffa	Elgin, E. R. O	×
James River	Antigonishe N. S	×
James River Station	Antigonishe N. S	×
Jamestown	Huron, E. R. O	×
Jamesville	Victoria N. S	×
Jamieson	Lanark O	×
Janetville	Durham, E. R. O	×
Jeneville	Gloucester N. B	×
Jursberg	Muskoka & P. S'd O	×
Jarrett's Corners	Simcoe, E. R. O	×
Jarvis	Haldimand O	800
Jasper	Grenville, N. R. O	160
Janvrin's Harbour	Richmond N. S	×
Jeddore Oyster Pd's	Halifax N. S	×
Jefferson	York, W. R. O	×
Jeffry	King's N. B	×
Jemseg	Queen's N. B	150
Jenkins	Queen's N. B	×
Jericho	Lambton, E. R. O	×
Jermyn	Peterboro' O	×
Jersey Mills	Beauce Q	×
Jerseyville	Brant, N. R. O	150
Jessopville	Grey, S. R. O	×
Jewett's Mills	York N. B	×
Jocelyn	Algoma O	×
Jock Vale	Carleton O	×
Joggin Bridge	Digby N. S	×
Joggin Mines	Cumberland N. S	×
Johnson	Grey, N. R. O	×
Johnson Crossing	Colchester N. S	×
Johnson's Landing	N. Westminster B. C	×
Johnson's Mills	Huron, S. R. O	×
Johnson's Mills	Westmoreland N. B	×
Johnston's River	Queen's P. E. I	×
Johnston	Queen's N. B	300
Johnville	Compton Q	500
Johnville	Carleton N. B	×
Jolicure	Westmoreland N. B	250
* *Joliette*	Joliette Q	4,500
Joly	Provencher M	×
Jones Falls	Leeds, S. R. O	×
Jonquieres	Chicoutimi Q	×
Jordan	Lincoln O	170
Jordan Bay	Shelburne N. S	150
Jordan Bay, (e. s.)	Shelburne N. S	×
Jordan Mountain	King's N. B	×
Jordan Station	Lincoln O	×
Josephine	Simcoe, N. R. O	×
Josephsburg	Waterloo, S. R. O	×
Joynt	Ottawa Q	×
Juddhaven	Simcoe, E. R. O	×
Judique	Inverness N. S	300
Juniper Mount	Cape Breton N. S	×
Jura	Lambton, E. R. O	×
Juvenile Settlement	Sunbury N. B	×
Kagawong	Algoma O	×
Kaladar	Addington O	×
Kamloops	Yale B. C	300
Kamouraska	Kamouraska Q	1,000
Kars	Carleton O	150
Kars	King's N. B	×
Katepwe	Assa	×
Katevale	Stanstead Q	×
Katrine	Muskoka & P S'd O	×
Kazubazua	Ottawa Q	×
Kay Settlement	Westmoreland N. B	×
Keady	Grey, N. R. O	×
Kearney	Muskoka & P S'd O	×
Keating's	King's N. B	×
Keats	Westmoreland N. B	×
Keenansville	Cardwell O	200
* *Keene*	Peterboro', E. R. O	400
Keewatin Mills	O	×
Keith	Bothwell O	×
Keith	King's N. B	×
Keith	Compton Q	×
Keithley Creek	Cariboo B. C	425
Keldon	Grey, E. R. O	250
Kelly's Cross	Queen's P. E. I	×
Kelly's Cove	Yarmouth N. S	×
Kelso	Huntingdon Q	1,000
Kelso	Halton O	×
Kelvin	Norfolk, N. R. O	×
Kemble	Grey, N. R. O	×
Kempt	Queen's N. S	150
Kempt Head	Victoria N. S	×
Kempt Road	Richmond N. S	×
Kempt Shore	Hants N. S	×
Kempt Town	Colchester N. S	×
* *Kemptville*	Grenville, N. R. O	1,400
Kemptville	Yarmouth N. S	×
Kendal	Durham, W. R. O	1
Kenlis	Assa	
Kennaway	Peterboro', E. R. O	×
Kennebec Line	Beauce Q	700
Kenilworth	Wellington, N. R. O	×
Kenmore	Russell O	200
Kennetcook	Hants N. S	×
Kennington Cove	Cape Breton N. S	×
Kenney	Perth, N. R. O	×
Kensington	Huntingdon Q	×
Kensington	Middlesex, E. R. O	×
Kensington	Prince P. E. I	300
Kent Junction	Kent N. B	×
Kerrowgare	Pictou N. S	×
Kent	Halifax N. S	×
Kent Bridge	Bothwell O	×
Kentville	King's N. S	1,800
Keohan	King's N. B	×
Keppoch	Antigonishe N. S	×
Kerrwood	Middlesex, W. R. O	300
Kerry	Albert N. B	×
Kertch	Lambton, W. R. O	×
Keswick	York, N. R. O	125
Keswick Ridge	York N. B	175
Ketch Harbour	Halifax N. S	×
* *Kettleby*	York, N. R. O	120
Kewstoke	Inverness N. S	×
Keyser	Middlesex, W. R. O	×
Khiva	Middlesex, N. R. O	×
Kilbride	Halton O	250
Kilburn's Landing	Victoria N. B	×
Kildare	Joliette Q	×
Kildare	Prince P. E. I	×
Kildare Capes	Prince P. E. I	×
Kildare Station	Prince P. E. I	×
Kildonan	Lisgar M	×
Kilfoil	Carleton N. B	×
Kilgorie	Simcoe, S. R. O	×
Kilkenny Lake	Cape Breton N. S	×
Killaloe	Renfrew, N. R. O	250
Killarney	Algoma O	×
Killarney	Selkirk M	×
Killean	Wellington, S. R. O	×
Killyleagh	Simcoe, S. R. O	×
Kilmanagh	Peel O	×
Kilmarnock	Lanark, S. R. O	100
Kilmartin	Middlesex, W. R. O	×
Kilmaurs	Carleton O	×
Kilsyth	Grey, N. R. O	×
Kilworthy	Ontario, N. R. O	×
Kimball	Lambton, W. R. O	×
Kimberley	Grey, E. R. O	×
Kinbrae	Assa	×
Kinburn	Lanark, N. R. O	200
* *Kincardine*	Bruce, W. R. O	3,000
Kincardine	Victoria N. B	×
King	York, N. R. O	310
Kingarf	Bruce, W. R. O	×
Kingsborough	King's P. E. I	×
King Creek	York, N. R. O	100
Kingairth	York N. B	×
Kinglake	Norfolk, S. R. O	×
Kingross	Inverness N. S	×
Kingsbridge	Huron, W. R. O	×
Kingsbury	Richmond Q	100
Kingsbury	Lunenburg N. S	×
Kingsclear	York N. B	100
Kingscote	Grey, E. R. O	×
Kingscourt	Lambton, E. R. O	×
Kingscroft	Stanstead Q	×
Kingsey	Drummond Q	100
Kingsey Falls	Drummond Q	300
Kingsford	Hastings E. R. O	100
Kingsley	Selkirk M	×
Kingsley	York N. B	×
Kingsmill	Elgin, E. R. O	100
Kingsport	King's N. S	
* *Kingston*	Kingston O	19,264
* *Kingston*	King's N. B	600
Kingston	Kent N. B	×
Kingston Mills	Frontenac O	200
Kingston Station	King's N. S	100
Kingston Station	Kingston O	×
Kingston Village	King's N. S	100
* *Kingsville*	Essex, S. R. O	900
Kingsville	Inverness N. S	×
King's Wharf	Victoria, S. R. O	×
Kinistino	Saskatchewan Ter.	×
Kinkora	Perth, N. R. O	×
Kinloss	Bruce, W. R. O	140
Kinlough	Bruce, W. R. O	120
* *Kinmount*	Victoria, N. R. O	500
* *Kinnear's Mills*	Megantic Q	900
Kinross	Queen's P. E. I	×
Kinsale	Ontario, W. R. O	100
Kinsman's Corners	King's N. S	×
Kintail	Huron, W. R. O	×
Kintore	Oxford, N. R. O	×
Kintore	Victoria N. B	×
Kippen	Huron, S. R. O	×
Kippewa	Pontiac Q	×
Kirby	Durham, W. R. O	×
Kirkdale	Drummond Q	×
* *Kirkfield*	Victoria, N. R. O	900
Kirkhill	Glengarry O	×
Kirkhill	Cumberland N. S	×
Kirkland	Carleton N. B	200
Kirk's Ferry	Ottawa Q	×
Kirkton	Perth, S. R. O	180
Kirkpatrick	Saskatchewan Ter.	×
Kirkville	Simcoe, N. R. O	×
Kirkwall	Wentworth, N. R. O	×
Kleinburg	York, W. R. O	850
Klock's Mills	Dist. of Nipissing O	×
Knapdale	Middlesex, W. R. O	×
Knatchbull	Halton O	×
Knowlesville	Carleton N. B	×
* *Knowlton*	Brome Q	800
Knowlton Landing	Brome Q	×
Knoxford	Carleton N. B	×
Knoydart	Pictou N. S	×
Kola	Selkirk M	×
Kolapore	Grey, E. R. O	×
Kolbeck	Cumberland N. S	×
Kohler	Haldimand O	×
Komoka	Middlesex, S. R. O	150
Kootenay (sub)	Yale B. C	300
Korah	Algoma O	×
Kossuth	Waterloo, S. R. O	150
Kouchibouguac	Kent N. B	600
Kouchibouguac B'ch	Kent N. B	×
Kurtzville	Wellington, N. R. O	×
* *La Baie*	Yamaska Q	1,000
Laberge	Chateauguay Q	×
Labarre	Chicoutimi Q	350
La Beauce	Beauce Q	800
La Broquerie	Provencher M	×
L'Acadie	St. Johns Q	1,000
Lac a la Tortue	Champlain Q	×
Lachenaie	L'Assomption Q	100
* *Lachine*	Jacques-Cartier Q	2,800
La Chevrotiere	Portneuf Q	×
Lachine Rapids	Jacques Cartier Q	×
Lachute Mills	Argenteuil O	×
* *Lachute*	Argenteuil Q	1,300
La Conception	Ottawa Q	×
La Dech. Riv. l'Ours	Chicoutimi Q	×
Lac La Hache	Cariboo B. C	×
Lac Masson	Terrebonne Q	800
Lac Noir	L'Islet Q	100
* *Lacolle*	St. Johns Q	1,000
Lac Ouareau	Montcalm Q	×
Lac Rond	Ottawa Q	×
Lac St. Joseph	Portneuf Q	×
Lac Simon	Portneuf Q	×
Ladner's Landing	N. Westminster B. C	500
Lady Bank	Grey, E. R. O	×
La Fayette	Bellechasse Q	×
Lafontaine	Simcoe, E. R. O	×
Laggan	Glengarry O	200
La Guerre	Huntingdon Q	100
La Have Cross Roads	Lunenburg N. S	×
La Have Island	Lunenburg N. S	×
Lake Ainslie Chapel	Inverness N. S	×
Lake Ainslie (w. s.)	Inverness N. S	400
Lake Ainslie (e. s.)	Inverness N. S	×
Lake Ainslie (s. s.)	Inverness N. S	×
Lake Annis	Yarmouth N. S	×
Lake Aylmer	Wolfe Q	1,000
Lake Beauport	Quebec Q	×
Lakeburn	Westmoreland N. B	×
Lake Charles	Grey, N. R. O	×
Lake Dore	Renfrew, N. R. O	×
Lake Egmont	Halifax N. S	×
Lake Etchemin	Dorchester Q	×
Lakefield	Argenteuil Q	×
Lakefield	King's N. B	×
* *Lakefield*	Peterboro', E. R. O	1,200
Lake Frances	Lisgar M	×
Lake George	York N. B	100
Lake George	King's N. S	×
Lake George	Yarmouth N. S	×
Lakehurst	Peterboro', E. R. O	×
Lakelands	Cumberland N. S	×
Lake Law	Inverness N. S	×
Lakelet	Huron, E. R. O	200
Lake Opinicon	Frontenac O	×
Lake Paul	King's N. S	×
Lakeport	Northumberl'd, E. R. O	200
Lake Ramsay	Lunenburg N. S	×
Lake Road	Albert N. B	×
Lakeside	Oxford, N. R. O	×
Lakeside	Yarmouth N. S	×
Lake St. Mary	Ottawa Q	×
Lake Stream	Kent N. B	×
Lake Talon	Dist. of Nipissing O	×
Lake Temiscamingue	Pontiac Q	×
Lakevale	Antigonishe N. S	×
Lake Verd	Queen's P. E. I	×
Lakeview	Argenteuil Q	×
Lakeview	Queen's N. B	×
Lakeview	Elgin, E. R. O	×
Lakeville	Carleton N. B	150
Lakeville	King's N. S	200
Lakeville	King's P. E. I	×
Lakeville Corner	Sunbury N. B	×
Lake Weden	Wolfe Q	300
L'Amable	Hastings, N. R. O	×
L'Amaroux	York, E. R. O	200
Lamartine	L'Islet Q	×
Lambeth	Middlesex, S. R. O	250
Lambton	Beauce Q	400
Lambton Mills	York, W. R. O	600
Lamlash	Grey, S. R. O	×
Lammermoor	Lanark, N. R. O	×
* *Lanark*	Lanark, N. R. O	700
* *Lancaster*	Glengarry O	1,500
Lancelot	Muskoka & P S'd O	×
Landreville	Beauharnois Q	200
Landry	Gloucester N. B	×
Lands End	King's N. B	×
Land Villa	Montmagny Q	×
Lanes	Huron, W. R. O	×
Lang	Peterboro', E. R. O	180
Langevin	Dorchester Q	500



NORTH-WESTERN PART

OF

ONTARIO

SCALE OF MILES

EXPLANATION.

Ontario, (north west part.)

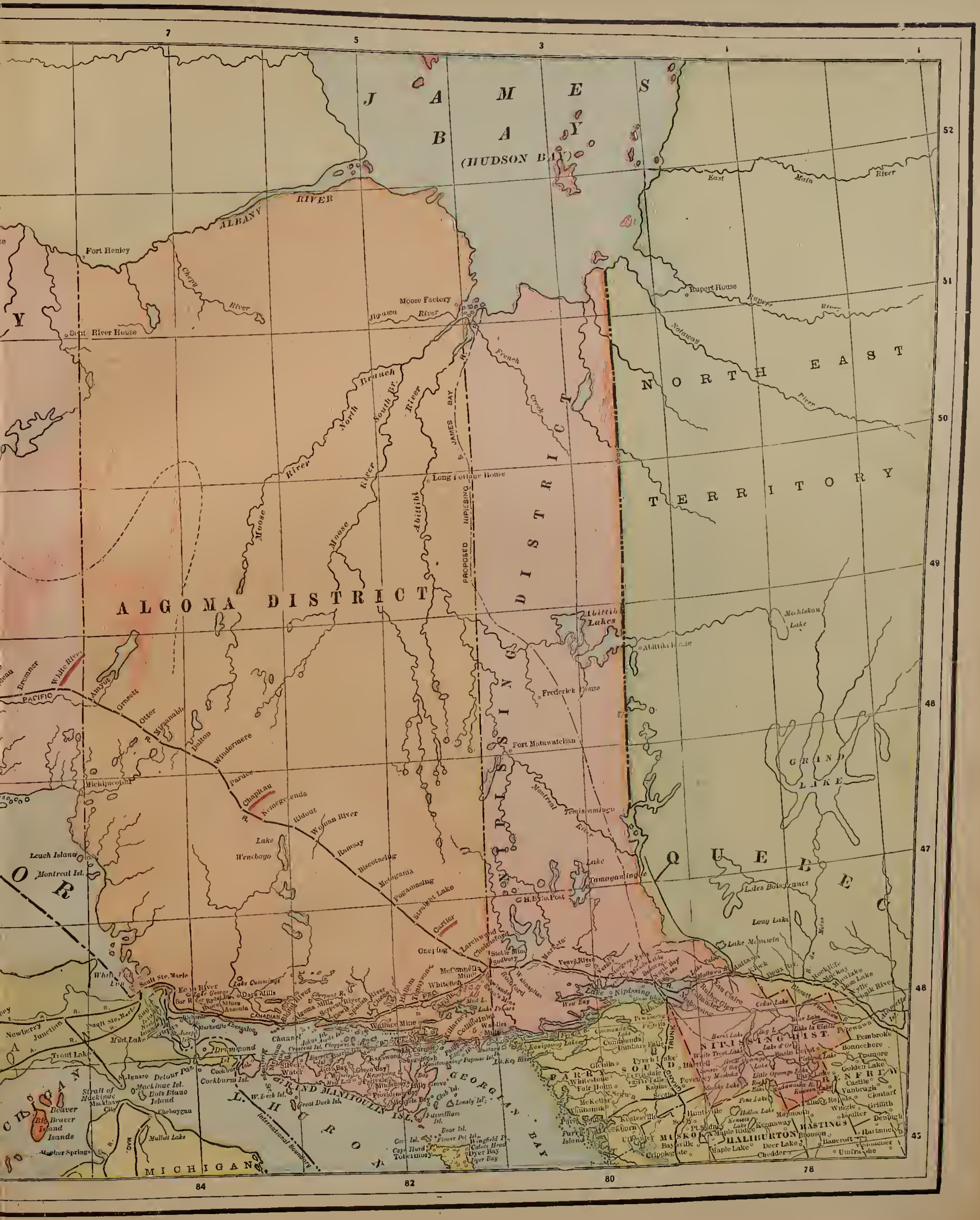
Canadian Pacific……………………………

Grand Trunk……………………………

Lake Temiscamingue Colonization……………

Port Arthur, Duluth & Western……………

Longitude West from Washington
17
15
13
11
9
54
52
50
48
94
92
90
88
86
Longitude West from Greenwich
0 10 20 30 40 50 60 70 80 90 100
Family Lake
Albany House
Albany Lake
Pokhoen Lake
Cat House
Cat Lake
Paint Lake
Wapicopa Lake & Fort
Weenisk Lake & Fort
Equan Lake
Cat Lake River
Osnaburg House
Lake St. Joseph
Red House
Red Lake
Lake Prince of Wales
Lake Paquash
KEEWATIN
Wilcox L.
Oak Lake
Maynards Lake
Julian Lake
RAINY RIVER DISTRICT
LAKE OF THE WOODS
Minnietakie Lake
Sturgeon Lake
Bells Lake
Vermillion Lake
Deer Lake
Eagle L.
Big Fork
Falcon Island
Lake Rowan
Bend Lake
Manitou Lake
Crow L.
Sabaskong Bay
Lake Harris
Big Island
Heron Lake
Pekagoning L.
Clear Water Lake
Rainy Lake
Nemeukan Lake
Lake Kaogastkok
HUNTERS ISLAND
Cypress Lake
L. Saganagah
Gunflint Lake
Arrow Lake
Knife Lake
Pigeon River
MINNESOTA
THUNDER BAY DISTRICT
Lake Saran
Height of Land
Abetotikitchewan Lake
Kagenagami Lake
Liebing Lake
Lubemer Lake
Martins Falls House
Gloucester House
Wapentawanaga L.
Minaiskia Lake
LAKE NIPIGON
Wawanosh House
Nepigon House
Gull R.
Cliffs Bay
Ombabika R.
Poplar Lodge
Black Sturgeon Lake
Long Lake
Cat Lake
Steel Lake
McKays Lake
Nepigon
Mazokama
Gravel River
Rossport
Schreiber
Jack Fish
Middleton
Peninsula
Heron Bay
Pic Island
Slate Is.
Copper Isl.
Simpson Isl.
Flour Isl.
Isle Ignace
Nepigon B.
Wolf River
Dog Lake
Pearl River
Mackenzie
Thunder Cape
Port Arthur
Thunder Bay
Fort William
Murillo
Kaministiquia
Finmark
Whitefish Lake
Silver Islet
Isle Chapeau
Passage Isl.
Scovills Pt.
Isle Royale
Martin
Carlstadt
Upsala
Savanne
Dexter
Buda
L. des Iles
Mille Lacs
Shelandowan Lake
Barril L.
LAKE SUPERIOR
Michipicoten Island
Caribou Island
MICHIGAN
WISCONSIN
GREEN BAY
L. MICHIGAN
Minnesota Pt.
Wisconsin Pt.
Superior
Bayfield
Madaline Isl.
Ironton Bay
Ashland
Middle River
Drummond
Penokee
Bessemer
Gogebic Lake
Gogebic
Ontonagon
Rockland
L'Anse
Baraga
Negaunee
Marquette
Michigamme
Ishpeming
Beacon
Republic
Cascade Jc.
Stoneville
Au Train
Munising Sta.
Seney
Newberry
Grand Isl.
State Line
Iron River
Crystal Falls
Metropolitan
Florence
Quinnesec
Escanaba
Bay de Noquet
Manistique
Hayward
Crop Lake
Lake Courte Oreilles
Veudo
Lake Chetac
Red Cedar Lake
Fifield
Phillips
Rhinelander
Pelican Lake
Monico
Prentice
Flambeau
Barron

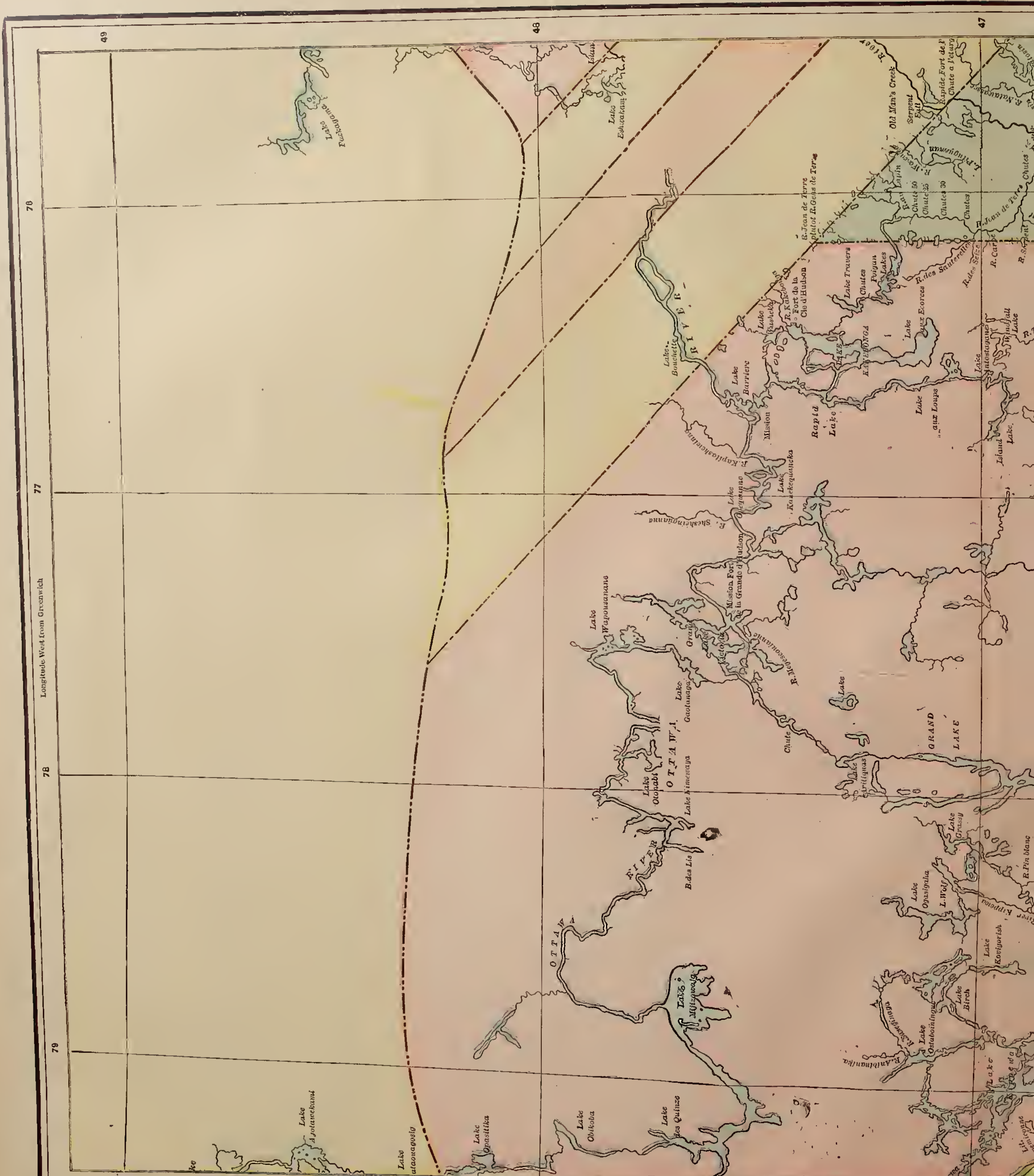

JAMES BAY
(HUDSON BAY)
ALBANY RIVER
Fort Henley
Cheepy River
Moose Factory
Abitibi River
Rupert House
Rupert River
East Main River
Notaway River
NORTH EAST TERRITORY
French Creek
North Branch
South Br.
Moose River
PROPOSED NIPISSING & JAMES BAY R.R.
Long Portage House
ALGOMA DISTRICT
NIPISSING DISTRICT
Abittibi Lakes
Frederick House
Fort Matawatchan
Mechiskan Lake
GRAND LAKE
Montreal River
Temiscaming
Lake Tamagaming
H.B. Co. Post
QUEBEC
L. des Bois Francs
Long Lake
Lake Memewin
White River
Bremner
PACIFIC
Amyot
Gransett
Otter
Missanabie
Dalton
Windermere
Peruce
Chapleau
Nemegosenda
Ridout
Woman River
Ramsay
Biscotasing
Metagama
Pogamasing
Straight Lake
Cartier
Larchwood
Chelmsford
Onaping
Stobie Mine
Sudbury
Lake Wenebayo
Michipicoten
Leach Island
Montreal Isl.
Sault Ste. Marie
Echo River
Bar River
Lake Cummings
Day Mills
Thessalon
Algoma Mills
Spanish River
Serpent River
Wallace Mine
McConnell Mine
Whitefish
Lake Nipissing
North Bay
Mattawa
Sturgeon Falls
Veuve River
Callander
West Bay
Eau Claire
Rutherglen
Pembroke
Renfrew
Arnprior
NIPISSING DIST.
PARRY SOUND
MUSKOKA
HALIBURTON
HASTINGS
Huntsville
Bracebridge
Gravenhurst
Parry Sound
Magnetawan
GEORGIAN BAY
GRAND MANITOULIN ISL.
Drummond Isl.
Cockburn Isl.
LAKE HURON
International Boundary
Cabot Head
Tobermory
Dyer Bay
Fitzwilliam Isl.
Lonely Isl.
Club Isl.
Strait of Mackinac
Mackinac Isl.
Bois Blanc Island
Cheboygan
Mullett Lake
Beaver Island
Big Beaver Island
Harbor Springs
Newberry
Trout Lake
Detour
MICHIGAN
ONTARIO
7
5
3
1
52
51
50
49
48
47
46
45
84
82
80
78

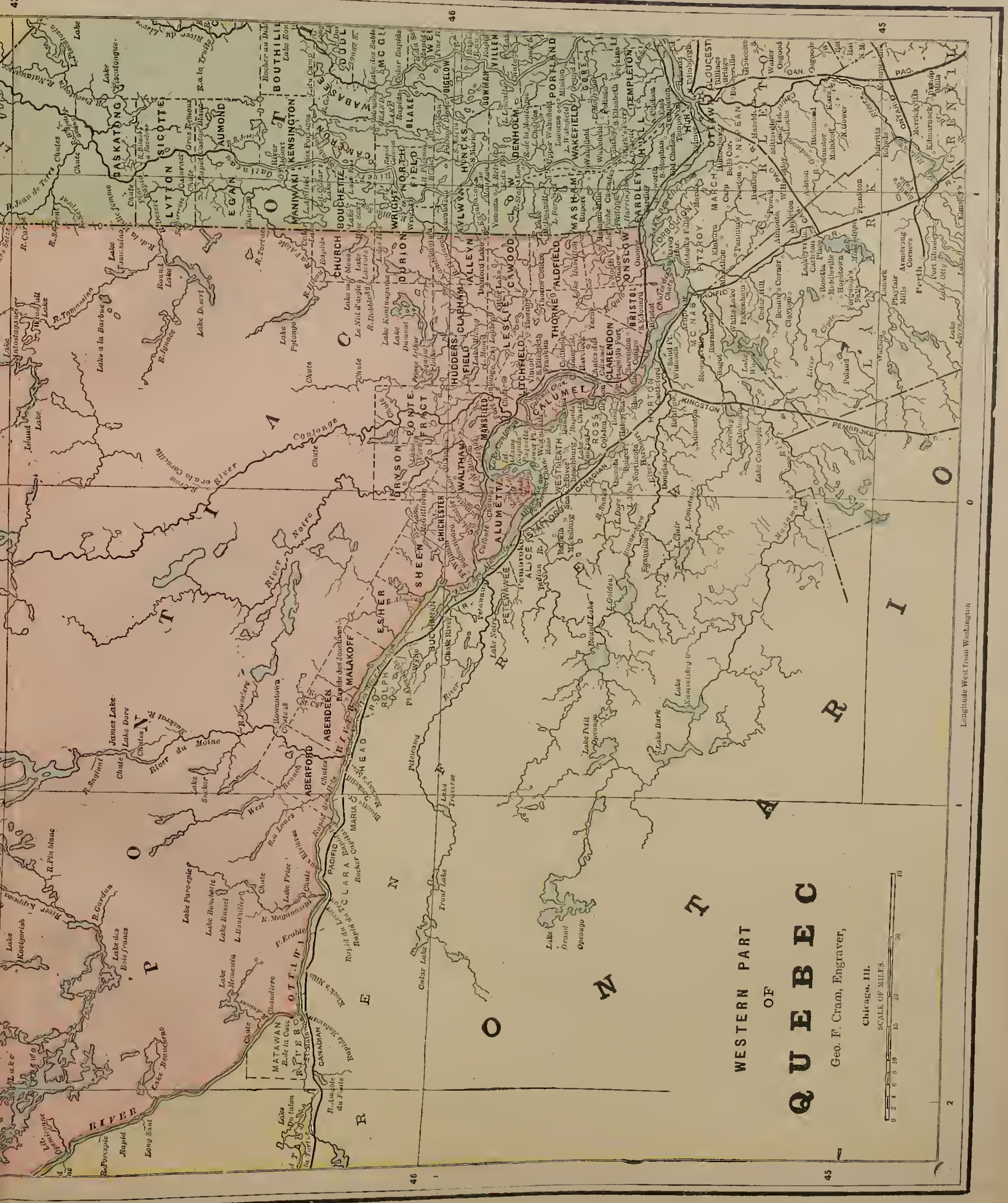
LIST OF POST OFFICES IN CANADA.

POST OFFICE.	ELECTORAL DISTRICT.	POP.
Langford	Brant, N. R. O	150
Langille's	Lunenburg N. S	×
Langley	N. Westminster B. C	100
Langley Prairie	N. Westminster B. C	×
Langside	Bruce, W. R. O	100
Langstaff	York, E. R. O	×
Langton	Norfolk, S. R. O	300
Langvale	Selkirk M	×
L'Annonciation	Ottawa Q	×
Lanoraie	Berthier Q	600
Lansburn	Marquette M	×
Lansdowne	Carleton N. B	×
* *Lansdown*	Leeds, S. R. O	300
L'Anse a Giles	Montmagny Q	250
L'Anse a la Cabane	Gaspe Q	×
L'Anse au Foin	Chicoutimi Q	×
L'Anse aux Gascons	Bonaventure Q	500
Lansing	York, W. R. O	100
L'Anse St. Jean	Chicoutimi Q	×
Lantz	Lunenburg N. S	×
La Patrie	Compton Q	350
La Petite Riviere	Quebec Q	×
La P. R. St. Francois	Charlevoix Q	×
LaPlaine	Terrebonne Q	200
* *Laprairie*	Laprairie Q	1,500
La Presentation	St. Hyacinthe Q	300
Lapland	Lunenburg N. S	×
L'Archeveque	Richmond N. S	×
L'Ardoise	Richmond N. S	215
Larkin	Hastings, E. R. O	×
Larochelle	Megantic Q	×
Larry's River	Guysboro' N. S	×
La Salette	Norfolk, N. R. O	×
Lascelles	Ottawa Q	×
Laskay	York, N. R. O	150
L'Assomption	L'Assomption Q	3,000
Lasswade	Peterboro', E. R. O	×
Laterriere	Chicoutimi Q	×
Latimer	Frontenac O	×
Latona	Grey, S. R. O	×
Latour's Mills	Pontiac Q	×
Lattie's Brook	Hants N. S	×
Launching Place	King's P. E. I	×
Laurel	Wellington, N. R. O	×
Laurel	Argenteuil O	×
* *Laurentides*	L'Assomption Q	×
Lauzon	Levis Q	4,000
Laval	Montmorency Q	760
Lavaltrie	Berthier Q	900
Lavant	Lanark, N. R. O	×
Lavant Station	Lanark, N. R. O	100
La Vase	Muskoka O	100
Lavender	Simcoe, S. R. O	×
L'Avenir	Drummond Q	250
Lawfield	Queen's N. B	×
Lawrence Station	Charlotte N. B	100
Lawrence Station	Elgin, W. R. O	100
Lawrencetown	Annapolis N. S	600
Lawrencetown	Halifax N. S	×
Lawrenceville	Shefford Q	200
Lawson	Queen's N. B	×
Layton	Ontario, N. R. O	×
Leadbury	Huron, S. R. O	×
Leafield	Peterboro', E. R. O	×
* *Leamington*	Essex, S. R. O	1,500
Learned Plain	Compton Q	×
Leaskdale	Ontario, N. R. O	100
Lebanon	Wellington, C. R. O	×
Lebret	Assa	×
Le Breton Flats	Carleton O	×
Leclerville	Lotbiniere Q	650
Le C. D'Arthabaska	Arthabaska Q	×
Ledge	Charlotte N. B	×
* *Leeds*	Megantic Q	500
Leeds Village	Megantic Q	×
Lefaivre	Prescott O	200
Lefroy	Simcoe, S. R. O	200
Legere	Northumberland N. B	×
Legerville	Kent N. B	×
Leg Lake	Simcoe, E. R. O	×
Lehman Landing	Algoma O	×
Leicester	Cumberland N. S	×
Leinster	Lennox O	×
Leitche's Creek	Cape Breton N. S	×
Leith	Grey, N. R. O	×
Leitrim	Russell O	×
Lemesurier	Megantic Q	×
Lemieux	Prescott O	100
Lemonville	Ontario, W. R. O	×
Lennox	Selkirk M	×
Lennox Ferry	Richmond N. S	100
* *Lennoxville*	Sherbrooke Q	900
Leonardville	Charlotte N. B	×
Leopold	Argenteuil Q	×
L'Epiphanie	L'Assomption Q	600
Lepreaux	Charlotte N. B	300
Lequille	Annapolis N. S	×
Les Dalles	Montcalm Q	×
Les Eboulements	Charlevoix Q	2,000
Les Ecureuils	Portneuf Q	200
Les Escoumains	Saguenay Q	800
Les Gr. Bergeronnes	Saguenay Q	×
Leskard	Durham, W. R. O	110
Leslie	York, E. R. O	×
Les Pet. Bergeronnes	Saguenay Q	×
Letellier	Provencher M	×
Lethbridge	Alta	600
Letete	Charlotte N. B	200
Letterkenney	Renfrew, S. R. O	×
Levis	Levis Q	7,600
Lewis Bay	Cape Breton N. S	×
Lewis Head	Shelburne N. S	120
Lewisham	Ontario, N. R. O	×
Lewis Mountain	Westmoreland N. B	×
Lewis Mountain	Inverness N. S	×
Lewisville	Westmoreland N. B	×
Libbytown	Stanstead Q	200
Lidcote	Bothwell O	×
Lieury	Middlesex, N. R. O	×
Lifford	Durham, E. R. O	×
Lillooet	Cariboo B. C	×
Lily	Cumberland N. S	×
Lily Lake	King's N. B	×
Lily Lake	Algoma O	×
Lily Oak	Grey, N. R. O	×
Lime Bank	Russell O	×
Lime Hill	King's N. B	×
Lime Hill	Inverness N. S	×
Limehouse	Halton O	150
Limekiln	York N. B	×
Lime Lake	Hastings, E. R. O	×
Lime Ridge	Wolfe Q	×
Lime Rock	Pictou N. S	×
Lincoln	Sunbury N. B	×
Linda	Compton Q	×
Linden	Cumberland N. S	×
Linden Valley	Victoria, S. R. O	×
Lindenwood	Grey, N. R. O	×
* *Lindsay*	Victoria, S. R. O	6,000
Lindsay	Carleton N. B	×
Lineboro'	Stanstead Q	×
Lingan	Cape Breton N. S	300
Limere	Beauce Q	×
Linton	York, N. R. O	150
Lintons	Sunbury N. B	×
Lintrathen	Selkirk M	×
Linwood	Waterloo, N. R. O	550
Linwood	Antigonishe N. S	×
Linn's Head	Bruce, N. R. O	×
Lisbon	Oxford, N. R. O	×
Lisburn	Bruce, W. R. O	×
Liscombe	Guysboro' N. S	100
Liscombe Mills	Guysboro' N. S	×
Lisgar Station	Drummond Q	×
Lisle	Simcoe, S. R. O	200
L'Islet	L'Islet Q	1,000
Lismore	Pictou N. S	150
* *Listowel*	Perth, N. R. O	3,000
Little Bass River	Colchester N. S	×
Little Branch	Northumberland N. B	×
Little Bras D'Or	Cape Breton N. S	200
Little Bras D'Or (s. s.)	Cape Breton N. S	×
Little Britain	Victoria, S. R. O	400
Little Brook Station	Digby N. S	×
Little Current	Algoma O	300
Little Cape	Westmoreland N. B	×
Little Cascapedia	Bonaventure Q	×
Little Forks	Kent N. B	×
Little Glace Bay	Cape Breton N. S	405
Little Harbour	King's P. E. I	×
Little Harbour	Pictou N. S	200
Little Judique	Inverness N. S	×
Little Lepreaux	Charlotte N. B	×
Little Lorraine	Cape Breton N. S	×
Little Mabou	Inverness N. S	×
Little Metis	Rimouski Q	800
Little Musquash	St. John N. B	×
Little Narrows	Victoria N. S	150
Little Pabos	Gaspe Q	300
Little Pierre Jacques	Prince P. E. I	×
Little Pond	King's P. E. I	×
Little Rapids	Algoma O	×
Little Rideau	Prescott O	200
Little Ridge	Albert N. B	×
Little Ridgetown	Charlotte N. B	×
L. River, (Coverdale)	Albert N. B	×
Little River, East	Gaspe Q	×
Little River, (Elgin)	Albert N. B	×
Little River	Sunbury N. B	×
Little River	Cumberland N. S	×
Little River	Digby N. S	×
Lit. Riv. (Mid. Musq)	Halifax N. S	×
Little Rocher	Albert N. B	×
L. Salmon Riv. Mills	St. John N. B	×
Little Sands	King's P. E. I	150
Little Shemogue	Westmoreland N. B	×
Lit. Shippigan, W. O.	Gloucester N. B	×
Little Tignish	Prince P. E. I	×
Littleton	Marquette M	×
Littlewood	Shelburne N. S	×
Littlewood	Middlesex, S. R. O	×
Little York	Queen's P. E. I	×
Liverpool	Queen's N. S	2,997
Liverpool Market	Ontario, W. R. O	×
Living Spring	Wellington, E. R. O	×
Livingstone Cove	Antigonishe N. S	×
Lloydtown	York, N. R. O	450
Lobo	Middlesex, S. R. O	100
Lochaber	Antigonishe N. S	200
Lochaber Bay	Ottawa Q	×
Lochalsh	Huron, W. R. O	×
Loch Ban	Inverness N. S	×
Lockhartville	King's N. S	×
Loch Garry	Glengarry O	100
Lochiel	Glengarry O	×
Lochinvar	Glengarry O	×
Loch Lomond	St. John N. B	×
Loch Lomond	Richmond N. S	100
Lochside	Richmond N. S	×
Loch Winoch	Renfrew, S. R. O	×
* *Lockeport*	Shelburne N. S	400
Lockton	Cardwell O	×
Locust Hill	York, E. R. O	×
Lodi	Stormont O	×
Logan's Tannery	Pictou N. S	×
Loganville	Pictou N. S	×
Logierait	Lambton, W. R. O	×
Lagoch	Marquette M	×
Lombardy	Leeds, N. R. O	×
Londesborough	Huron, S. R. O	300
* *London*	London O	31,977
* *London, East*	Middlesex, E. R. O	×
Londonderry	King's N. S	×
Londonderry Station	Colchester N. S	590
Long Bay	Algoma O	×
Long Creek	Queen's P. E. I	×
Long Creek	Queen's N. B	100
Longfleet	Marquette M	×
Longford Mills	Ontario, N. R. O	135
Long Island	King's N. S	×
Long Island Main	Cape Breton N. S	×
Long Lake	Addington O	×
Longlaketon	Assa	×
Long Point	Hochelaga Q	250
Long Point	Inverness N. S	×
Long Point	King's N. B	×
Long Pt. of Mingan	Saguenay Q	×
Long Reach	King's N. B	×
Long River	Queen's P. E. I	×
Long Settlement	Carleton N. B	×
Longtinville	Russell O	×
Longueuil	Chambly Q	2,500
Longwood	Middlesex, S. R. O	×
Lonsdale	Hastings, E. R. O	200
Lonsdale	King's N. B	×
Loon Creek	Assa	×
Lord's Cove	Charlotte N. B	×
Loree	Grey, E. R. O	×
Lorette	Quebec Q	×
Loretto	Cardwell O	×
Loretto	Provencher M	×
L'Orignal	Prescott O	1,000
Lorimer Lake	Muskoka & P. S'd O	×
Loring	Muskoka & P. S'd O	×
Lorne	Bruce, W. R. O	×
Lorne	Richmond Q	100
Lorne	Selkirk M	×
Lorne	Pictou N. S	×
Lornevale	Colchester N. S	×
Lorneville	Victoria, N. R. O	×
Lorneville	Cumberland N. S	×
Lorraine	Cardwell O	×
Lorway Mines	Cape Breton N. S	×
Lost River	Argenteuil Q	150
Lotbiniere	Lotbiniere Q	600
Lot 1	Prince P. E. I	×
" 4	Prince P. E. I	×
" 6	Prince P. E. I	×
Lot 8	Prince P. E. I	×
" 10	Prince P. E. I	×
" 11	Prince P. E. I	×
" 12	Prince P. E. I	×
" 14	Prince P. E. I	×
" 16	Prince P. E. I	×
" 30	Queen's P. E. I	×
" 35	Queen's P. E. I	×
" 56	King's P. E. I	×
" 67	Queen's P. E. I	×
Lothair	Selkirk M	×
Lotus	Durham, E. R. O	200
Louisa	Argenteuil Q	×
Louisbury	Cape Breton N. S	×
Louise	Grey, S. R. O	×
Louiseville	Maskinonge Q	1,500
Louisville	Bothwell O	100
Lourdes	Megantic Q	×
Lourdes d. B. Sablon	Saguenay Q	×
Lovat	Bruce, S. R. O	×
Lovat	Pictou N. S	×
Lovering	Simcoe, E. R. O	×
Lovett	Northumberland O	×
Low	Ottawa Q	120
Lowbanks	Monck O	×
Lower Abougoggin	Westmoreland N. B	×
Lower Argyle	Yarmouth N. S	×
Lower Barney's River	Pictou N. S	×
Lower Blomidon	King's N. S	×
Lower Brighton	Carleton N. B	×
Lower Caledonia	Guysborough N. S	×
Lower Canard	King's N. S	×
Lower Canterbury	York N. B	100
Lower Cape	Albert N. S	×
Lower Caraquet	Gloucester N. B	×
Lower Cariboo River	Pictou N. S	×
Lower Cove	Cumberland N. S	×
Lower Coverdale	Albert N. B	150
Lower East Pubnico	Yarmouth N. S	×
Lower Economy	Colchester N. S	300
Lower Five Islands	Colchester N. S	×
Lower Fort Garry	Lisgar M	×
Lower Freetown	Prince P. E. I	×
L. French Village	York N. B	×
Lower Gagetown	Queen's N. B	×
Lower Granville	Annapolis N. S	×
L. Hallowell Grant	Antigonishe N. S	×
Lower Hayneville	York N. B	×
Lower Ireland	Megantic Q	500
Lower La Have	Lunenburg N. S	×
Lower L'Ardoise	Richmond N. S	×
L. Line, Queensbury	York N. B	×
Lower Maccan	Cumberland N. S	×
L. Meagher's Grant	Halifax N. S	×
Lower Montague	King's P. E. I	×
Lower Napan	Northumberland N. B	×
Lower Newcastle	Northumberland N. B	×
Lower Nicola	Yale B. C	×
Lower Northfield	Lunenburg N. S	×
Lower Onslow	Colchester N. S	×
Lower Poquiock	York N. B	×
Lower Prince William	York N. B	400
Lower Prospect	Halifax N. S	×
Lower Queensbury	York N. B	×
Lower River Hebert	Cumberland N. S	×
L. River Inhabitants	Richmond N. S	×
Lower Sackville	Halifax N. S	×
Lower Selmah	Hants N. S	×
L. Set. Mid. River	Victoria N. S	×
L. Set. South River	Antigonishe N. S	×
L. Ship Harbour	Halifax N. S	×
L. Southampton	York N. B	200
Lower St. Mary's	York N. B	×
Lower Stewiacke	Colchester N. S	×
Lower Turtle Creek	Albert N. B	×
Lower Wakefield	Carleton N. B	×
Lower Washabuck	Victoria N. S	×
Lower Wentworth	Cumberland N. S	×
Lower West Jeddore	Halifax N. S	×
Lower West Pubnico	Yarmouth N. S	×
Lower Windsor	Carleton N. B	×
L. Wood Harbour	Shelburne N. S	×
Lower Woodstock	Carleton N. S	×
Lowestoft	Selkirk M	×
Low Point	Inverness N. S	×
Lowville	Halton O	150
Lozier Settlement	Gloucester N. B	×
* *Lucan*	Middlesex, N. R. O	1,050
Lucas	Marquette M	×
Lucerne	Ottawa Q	×
* *Lucknow*	Bruce, W. R. O	1,500
Ludlow	Northumberland N. B	×
Lulu Island	N. Westminster B. C	×
Lumley	Perth, S. R. O	×
Lumsden	Albert N. B	×
Lundy	Kent O	×
Lunenburg	Stormont O	200
Lunenburg	Lunenburg N. S	3,500
Lurgan	Bruce, W. R. O	×
Luskville	Ottawa Q	×
Lutes Mountain	Westmoreland N. B	×
Lutherville	Brockville O	×
Luton	Elgin, E. R. O	×
* *Lyn*	Brockville O	500
Lynch Lake	Muskoka & P. S'd O	×
Lynden	Wentworth, N. R. O	500
Lyndhurst	Leeds, S. R. O	200
Lynedoch	Norfolk, S. R. O	200
Lynn	Colchester N. S	×
Lynnfield	Charlotte N. B	×
Lynn Valley	Norfolk, S. R. O	×
Lynnville	Norfolk, N. R. O	100
Lyons	Elgin, E. R. O	×
Lysander	Megantic Q	×
Lyster	Megantic Q	250
Lyster Station	Megantic Q	×
Lyttleton	Northumberland N. B	×
Lytton	Yale B. C	100
McAdam Junction	York N. B	400
McAdam's Lake	Cape Breton N. S	×
McAlister	King's N. B	×
McAlpine	Queen's N. B	×
McArras Brook	Antigonishe N. S	×
McAulay's	Victoria N. S	×
McCormack	Inverness N. S	×
McCready	Middlesex, W. R. O	×
McCrimmon	Glengarry O	×
McDonald's Corner	Queen's N. B	×
McDonald's Corners	Lanark, N. R. O	175
McDonald's Point	Queen's N. B	×
McDougall Sett	Westmoreland N. B	×
McGarry	Lanark, N. R. O	×
McGilley	Westmoreland N. B	×
McGrath Mountain	Pictou N. S	×
McGray	Shelburne N. S	×
McGregor	Essex, S. R. O	×
McGregor Station	Marquette M	×
McIntosh Mills	Leeds, S. R. O	100
McIver	Bruce, N. R. O	
McIntyre	Grey, E. R. O	100
McKay's Point	Victoria N. S	×
McKellar	Muskoka & P. S'd O	200
McKees Mills	Kent N. B	×
McKenzie's Corner	Carleton N. B	200
McKinlay	Lanark, N. R. O	×
McKinnon's Harbor	Victoria N. S	×
McKnight	King's N. B	
McLaren's Depot	Addington O	×
McLaughlin Road	Kent N. B	×
McLean	Assa	×
McLellan's Mountain	Pictou N. S	×
McLellan's Brook	Pictou N. S	×
McLeod Mills	Kent N. B	×
McNamee	Northumberland N. B	×
McNaughton	King's N. B	×
McPhail	Lanark, S. R. O	×
McPherson	Antigonishe N. S	×
McPherson's Ferry	Richmond N. S	×
Maberly	Lanark, S. R. O	110
Mabou	Inverness N. S	600
Mabou Coal Mines	Inverness N. S	×
Mabou Harbour	Inverness N. S	×
Mabou Har. Mouth	Inverness N. S	×
Maccan	Cumberland N. S	250
Macdonald	Lennox S	×
MacDougall	Prince P. E. I	×
Macinquac	York N. B	×
Mackey's Station	Renfrew, N. R. O	×
Mackville	King's N. B	×
Mace's Bay	Charlotte N. B	100
Macnamara's Island	Richmond N. S	×
Macnider	Rimouski Q	×
Mactaquack	York N. B	×
Macton	Wellington, C. R. O	×
Macville	Cardwell O	×
Maddington Falls	Arthabaska Q	×
Maddock	Prince P. E. I	×
Mader's Cove	Lunenburg N. S	×
* *Madoc*	Hastings, N. R. O	1,250
Magaguadavic	York N. B	×
Magdalen Islands	Gaspe Q	3,700
Magenta	Rouville Q	×
Maganetawan	Muskoka & P. S'd O	200
Maguire	Middlesex, N. R. O	×
Magog	Stanstead Q	1,000
Magoon's Point	Stanstead Q	×
Magpie	Saguenay Q	×
Magundy	York N. B	×
Mahone Bay	Lunenburg N. S	800
Maidstone	Essex, N. R. O	125
Mainadieu	Cape Breton N. S	150
Main River	Kent N. B	×
Maisonneuve	Hochelaga Q	×
Maitland	Grenville, S. R. O	200
Maitland	Hants N. S	600
Maitland	Annapolis N. S	×
Malagash	Cumberland N. S	×
Malagash Point	Cumberland N. S	×
Malagawatch	Inverness N. S	×
Malakoff	Carleton O	×
Malcolm	Bruce, E. R. O	×
Malignant Cove	Antigonishe N. S	50
Mallorytown	Leeds, S. R. O	350
Malmaison	Missisquoi Q	×
Malone	Hastings, N. R. O	×
Malton	Peel O	200
Malta	Ontario, N. R. O	×
Malvern	York, E. R. O	100
Malvina	Compton Q	×
Manchester	Ontario, N. R. O	200
Manda	Selkirk M	×
Mandamin	Lambton, W. R. O	×
Manilla	Victoria, S. R. O	400
Manion	Lanark, S. R. O	×
Manitowaning	Algoma O	350
Maniwaki	Ottawa Q	×
Manners Sutton	York N. B	250
Mannheim	Waterloo, S. R. O	100
Mannhurst	King's N. B	×
* *Manotick*	Carleton O	700
Mansewood	Halton O	×
Mansfield	Simcoe, S. R. O	×
Mansfield	Cumberland N. S	×
Mansfield	King's P. E. I	×
Mansonville	Brome Q	350
Mansonville Station	Brome Q	×
Manvers Station	Durham, E. R. O	×
* *Maple*	York, W. R. O	200
Maple Bay	Vancouver B. C	×
Maple Creek	Assa	100
Maple Green	Restigouche N. B	×
Maple Grove	Middlesex, E. R. O	×
Maple Grove	Megantic Q	×
Maple Hill	Bruce, S. R. O	×
Maple Hill	Megantic Q	×
Maplehurst	Carleton N. B	×
Maple Island	Muskoka & P. S'd O	×
Maple Lake	Victoria, E. R. O	150
Maple Leaf	Compton Q	×
Maple Lodge	Middlesex, N. R. O	×
Maple Ridge	N. Westminster B. C	×
Maple Ridge	Ontario, N. R. O	×
Maple Ridge	Pontiac Q	×
Mapleton	Elgin, E. R. O	×
Mapleton	Albert N. B	×
Mapeton	Cumberland N. S	×
Maple Valley	Simcoe, N. R. O	100
Maple View	Victoria N. B	150
Maplewood	Oxford, N. R. O	×
Maplewood	York N. B	×
Maquapit Lake	Sunbury N. B	×
Mar	Bruce, N. R. O	×
Marathon	Lanark, N. R. O	×
Marble Mountain	Inverness N. S	×
Marble Rock	Leeds, S. R. O	100
Marbleton	Wolfe Q	×
March	Carleton O	×
Marchbank	King's N. B	×
Marchurst	Carleton O	×
Marchmont	Simcoe, E. R. O	103
Marden	Wellington, S. R. O	×
Margaree Harbour	Inverness N. S	500
Margaree Forks	Inverness N. S	100
Margaretsville	Annapolis N. S	300
Margate	Prince P. E. I	150
Maria	Bonaventure Q	500
Maria Capes	Bonaventure Q	600
Marie Bridge	King's P. E. I	×
Marie Joseph	Guysboro' N. S	500
Marieton	Assa	×
Marion Bridge	Cape Breton N. S	×
Marion Bridge Road	Cape Breton N. S	×
Maritana	Huntingdon Q	×
* *Markdale*	Grey, S. R. O	800
* *Markham*	York, E. R. O	900
Markhamville	King's N. B	300
Marksville	Algoma O	×
Marlbank	Hastings, E. R. O	100

LIST OF POST OFFICES IN CANADA, 1887.

POST OFFICE.	ELECTORAL DISTRICT.	POP.
Marlborough	Assa	×
Marlow	Beauce Q	×
Marmion	Grey, N. R. O	×
Marmora	Hastings, N. R. O	400
Marney	Marquette M	×
Marnock	Huron, W. R. O	×
Marringhurst	Selkirk M	×
Marriott's Cove	Lunenburg N. S	250
Marsboro'	Compton Q	×
Marsden	Compton Q	×
Marsh	Pictou N. S	×
Marshall's Town	Digby N. S	300
Marshdale	Pictou N. S	×
Marshfield	Queen's P. E. I	×
Marsh Hill	Ontario, N. R. O	×
Marsh Lake	Cape Breton N. S	×
Marshville	Monck O	100
Marshy Hope	Pictou N. S	×
Marston	Norfolk, S. R. O	×
Marsville	Wellington, C. R. O	×
Martin's Head	St. John N. B	×
Martin's Point	Lunenburg N. S	×
Martin's River	Lunenburg N. S	200
Martintown	Glengarry O	375
Martinville	Compton Q	130
Marvelville	Russell O	×
Marvin	King's N. B	×
Marydale	Antigonishe N. S	×
Marysville	Hastings, E. R. O	×
Maryville	York N. B	300
Maryvale	Antigonishe N. S	×
Mascarene	Charlotte N. B	300
Mascouche	L'Assomption Q	×
Mascouche Rapids	L'Assomption Q	×
Mashum Mills	Ottawa Q	×
Maskawata	Selkirk M	×
Maskinonge	Maskinonge Q	2,100
Masonville	Middlesex, E. R. O	×
Massawippi	Stanstead Q	207
Massie	Grey, N. R. O	×
Mass Town	Colchester N. S	250
Mastigoche	Maskinonge Q	×
Matane	Rimouski Q	900
Matapedia	Bonaventure Q	200
Mattawatchan	Renfrew, S. R. O	×
Matheson	Victoria N. S	×
Matsqui	N. Westminster B. C	100
Mattatall Lake	Colchester N. S	×
* *Mattawa*	Dist. of Nipissing O	600
Maugerville	Sunbury N. B	100
Mavillette	Digby N. S	×
Mawcook	Shefford Q	350
Maxville	Glengarry O	450
Maxwell	Grey, E. R. O	100
Mayerville	Russell O	×
Mayfair	Middlesex, W. R. O	×
Mayfield	Peel O	106
Maynard	Grenville, S. R. O	103
Maynooth	Hastings, N. R. O	100
Mayo	Ottawa Q	×
Meadow	Albert N. B	×
Meadow Lea	Lisgar M	×
Meadowvale	Peel O	300
* *Meaford*	Grey, E. R. O	2,400
Meagher's Grant	Halifax N. S	×
Meat Cove	Victoria N. S	×
Mechanics' Set.	King's N. B	250
Mecanoma	Muskoka & P. S'd O	×
Medford	King's N. S	×
Medicine Hat	Assiniboia	600
Medina	Oxford, N. R. O	×
Meiklefield	Pictou N. S	×
Meiseners	Lunenburg N. S	×
Mekiwin	Marquette M	×
Melancthon	Grey, E. R. O	×
Melboro	Richmond Q	100
* *Melbourne*	Richmond Q	800
Melbourne	Marquette M	×
Meldrum Bay	Algoma O	×
Melford	Inverness N. S	×
Melgund	Selkirk M	×
Melissa	Muskoka & P. S'd O	×
Melita	Selkirk M	×
Melocheville	Beauharnois Q	250
Melrose	Hastings, E. R. O	100
Melrose	Guysboro' N. S	120
Melvern Square	Annapolis N. S	400
Melville	Prince Edward O	150
Melville Cross	Cardwell O	×
Memel	Albert N. B	×
Memramcook	Westmoreland N. B	300
Menie	Northumb'd, E. R. O	×
Menominee	Muskoka & P. S'd O	×
Menota	Selkirk M	×
Menteith	Selkirk M	×
Mercier	Montmagny Q	×
Merigomishe	Pictou N. S	400
Merivale	Carleton O	×
Merlin	Kent O	×
Mermaid Farm	Queen's P. E. I	×
* *Merrickville*	Grenville, N. R. O	818
Merritt	Grey, E. R. O	×
* *Merritton*	Lincoln O	1,800
Merton	Halton O	×
Metabetchouan	Chicoutimi Q	×
Meteghan	Digby N. S	1,400
Meteghan River	Digby N. S	×
Meteghan Station	Digby N. S	×
* *Metcalfe*	Russell O	400
Methot's Mills	Lotbiniere Q	100
Metchosin	Victoria B. C	200
Metgermette	Beauce Q	×
Metropolitan	Perth, S. R. O	×
Metz	Wellington, C. R. O	×
Meyersburg	Northumberland O	60
Miami	Selkirk M	×
Michael's Bay	Algoma O	×
Michie	Selkirk M	×
Michipicoten River	Algoma O	×
Micksburg	Renfrew, N. R. O	×
Middleboro'	Cumberland N. S	×
Middle Beaver Bank	Halifax N. S	×
Middle Cape	Cape Breton N. S	×
Middle Church	Lisgar M	×
Middle Co. Harbour	Guysboro' N. S	×
Middle Coverdale	Albert N. B	×
Middlefield	Queen's N. S	×
Middle Hainesville	York N. B	×
Middle La Have Ferry	Lunenburg N. S	×
Middle Manchester	Guysborough N. S	×
Middlemarch	Elgin, W. R. O	×
Middle Musquodoboit	Halifax N. S	1,000
Middlemiss	Middlesex, W. R. O	200
Middle Ohio	Shelburne N. S	×
Middle Porter's Lake	Halifax N. S	×
Middle River	Victoria N. S	120
Middle St. Francis	Victoria N. B	×
Middle Sackville	Westmoreland N. B	×
Middle Sackville	Halifax N. S	×
M. Sec. N. E. Margaree	Inverness N. S	×
M. Sec. Barney's River	Pictou N. S	×
Middle Simmonds	Carleton N. B	450
Middle Southampton	York N. B	×
Middle Stewiacke	Colchester N. S	×
* *Middleton*	Annapolis N. S	200
Middleton	Prince P. E. I	×
Middleton	Antigonishe N. S	×
Middle Town	Guysboro' N. S	×
* *Middleville*	Lanark, N. R. O	200
Midford	Muskoka & P. S'd O	×
Midgell	King's P. E. I	×
Midgic	Westmoreland N. B	×
Midhurst	Simcoe, N. R. O	200
* *Midland*	Simcoe, E. R. O	1,800
Midland	King's N. B	×
Mid Lothian	Muskoka & P. S'd O	×
Midnapore	Alta	×
Midville Branch	Lunenburg N. S	×
Midway	Albert N. B	×
Milburn	King's P. E. I	×
Milby	Sherbrooke Q	×
Mildmay	Bruce, E. R. O	900
Mile End	Hochelaga Q	×
Miletta	Stanstead Q	×
Milford	Prince Edward O	400
Milford	Annapolis N. S	500
Milford	St. John N. B	×
Milford Haven Bridge	Guysboro' N. S	150
Milford Station	Hants N. S	×
Milkish	King's N. B	×
Millar's Corners	Grenville, N. R. O	×
Millarton	Bruce, W. R. O	×
* *Millbank*	Perth, N. R. O	500
Millbank	Northumberland N. B	×
Millbridge	Hastings, N. R. O	100
* *Mill Brook*	Durham, E. R. O	1,100
Mill Brook	Pictou N. S	×
Mill Brook	Queen's N. B	×
Millbrook	Marquette M	×
Mill Cove	Lunenburg N. S	×
Mill Cove	Queen's N. B	×
Millcove	Queen's P. E. I	×
Mill Creek	Kent N. B	100
Mill Creek	Cape Breton N. S	×
Millegeville	St. John N. B	300
Mille Isles	Argenteuil Q	×
* *Mille Roches*	Cornwall O	400
Miller's Creek	Hants N. S	×
Millerton	Northumberland N. B	×
Mille Vaches	Saguenay Q	×
Millfield	Megantic Q	×
Millford	Marquette M	200
Mill Grove	Wentworth, N. R. O	150
Mill Haven	Lennox O	100
Milliken	York, E. R. O	×
Millington	Brome Q	×
Millington	Ontario, N. R. O	×
Mill River	Prince P. E. I	×
Mill Road	Lunenburg N. S	×
Mill Settlement	Sunbury N. B	×
Millstream	King's N. B	400
Millsville	Pictou N. S	×
* *Milltown*	Charlotte N. B	2,000
Milltown Cross	King's P. E. I	×
Mill View	Queen's P. E. I	100
Mill Village	Queen's N. S	400
Millville	King's N. S	300
Millville	York N. B	×
Millward	Alta	×
Milton	Queen's N. S	1,100
Milton, East	Shefford Q	200
Milton Station	Queen's P. E. I	×
* *Milton, West*	Halton O	1,303
Milverton	Perth, N. R. O	600
Mimico	York, W. R. O	×
Miminegash	Prince P. E. I	100
Minosa	Wellington, S. R. O	×
Mineville	Halifax N. S	×
* *Minden*	Victoria, N. R. O	350
Mindemoya	Algoma O	×
Mineral	Carleton N. B	×
Mineral Hill	Albert N. B	×
Mineral Rock	Cape Breton N. S	×
Minesing	Simcoe, N. R. O	300
Mingan	Saguenay Q	×
Mink River Road	King's P. E. I	×
Minnedosa	Marquette M	1,000
Minnewawa	Selkirk M	×
Minniska	Marquette M	×
Minudie	Cumberland N. S	600
Mira Gut	Cape Breton N. S	×
Mirable	Two Mountains Q	×
Miranda	Missisquoi Q	200
Miscou Light House	Gloucester N. B	×
Miscou Harbour	Gloucester N. B	×
Miscouche	Prince P. E. I	200
Mispec	St. John N. B	175
Mississippi Station	Addington O	×
* *Mitchell*	Perth, S. R. O	2,700
Mitchell's Bay	Kent O	×
Mitchell River	King's P. E. I	×
Mitchell Square	Simcoe, E. R. O	×
Mizonette	Gloucester N. B	×
Moe's River	Compton Q	100
Moffat	Halton O	×
Moffat	Assa	×
Mohawk	Brant, S. R. O	456
Mohr's Corners	Lanark, N. R. O	100
Moira	Hastings, N. R. O	100
Moisie	Saguenay Q	×
Molesworth	Wellington, N. R. O	×
Moline	Marquette M	×
Moltke	Bruce, E. R. O	100
Monaghan	Queen's P. E. I	×
Monck	Wellington, N. R. O	×
Monckland	Stormont O	300
Moncrieff	Huron, E. R. O	×
Moncton	Westmoreland N. B	8,765
Moncton Road	Westmoreland N. B	×
Moneymore	Hastings, E. R. O	×
Mongenais	Vaudreuil Q	×
Mongolia	York, E. R. O	×
Monk's Head	Antigonishe N. S	×
Monkton	Perth O	200
Mono Centre	Cardwell O	×
Mono Mills	Cardwell O	600
Mono Road Station	Cardwell O	140
Monsell	Ontario, N. R. O	×
Montague	Lanark, S. R. O	×
Montague Bridge	King's P. E. I	×
Montague Cross	King's P. E. I	×
Mont Dufresne	Richmond Q	×
Montague G'd Mines	Halifax N. S	×
Montcerf	Ottawa	×
Montgomery	Assa	×
Monticello	Wellington, N. R. O	×
Montcalm	Montcalm Q	×
Monteagle Valley	Hastings, N. R. O	×
Mont Bello	Ottawa Q	600
Montefiore	Selkirk M	×
Montfort	Argenteuil Q	×
Mont Louis	Gaspe Q	300
Montmagny	Montmagny Q	×
Montmorency Falls	Quebec Q	×
Montmorin	Terrebonne Q	×
* *Montreal*	Montreal Q	216,650
Montreal River	Nipissing O	×
Montrose	Welland O	150
Montrose	Prince P. E. I	×
Montrose	Marquette M	×
Mt. St. Hilaire	Rouville Q	×
Mont St. Nicholas	St. John's Q	250
Monument Settlement	Carleton N. B	×
Moodyville	N. Westminster B. C	[illegible]
Moonstone	Simcoe, E. R. O	×
* *Moore*	Lambton, W. R. O	[illegible]
Moorefield	Wellington, C. R. O	500
Mooresburg	Grey, N. R. O	×
Moore's Falls	Victoria, N. R. O	×
Moore's Mills	Charlotte N. B	[illegible]
Moore's Station	Missisquoi Q	×
Mooresville	Middlesex, N. R. O	×
Moose Brook	Hants N. S	×
Moose Creek	Stormont O	×
Moose Jaw	Assiniboia N. W. T	600
Mooseland	Halifax N. S	×
Moose Mountain	Assiniboia N. W. T	×
Moose River	Pictou N. S	×
Moose River	Cumberland N. S	×
Moosomin	Assiniboia Ter.	×
Moran	Northumberland N. B	×
Marchintown	Elgin, W. R. O	×
Moray	Middlesex, N. R. O	×
Morecambe	King's N. B	×
Morden	Selkirk M	700
Morden	King's N. S	150
Morell	King's P. E. I	×
Morell Rear	King's P. E. I	×
Morell Station	King's P. E. I	×
Morewood	Dundas O	200
Morganston	Northumberland, E. R. O	×
Morin Flats	Argenteuil Q	×
Morley	Grey, E. R. O	×
Morningdale Mills	Perth, N. R. O	×
* *Morpeth*	Elgin, W. R. O	300
Moropano	Selkirk M	×
Morris	Provencher M	250
* *Morrisburg*	Dundas O	2,000
Morrisonville	Stormont O	×
Morriston	Wellington, S. R. O	430
Morristown	Antigonishe N. S	200
Morristown	King's N. S	×
Morton	Leeds, S. R. O	250
Morton's Corner	Lunenburg N. S	×
Marven	Lennox O	×
Mosborough	Wellington, S. R. O	×
Moscow	Addington O	100
Moser's River	Halifax N. S	×
Mosherville	Hants N. S	×
Moss Glen	King's N. B	×
Mosside	Middlesex, W. R. O	×
Mossley	Middlesex, E. R. O	100
Mossman's Grant	Lunenburg N. S	×
Motherwell	Perth, S. R. O	×
Mouhe's River	Kent N. B	×
Moulinette	Stormont O	300
Moulton Station	Monck O	×
Mountain Brook	Restigouche N. B	×
Mountain City	Marquette M	×
Mountain Dale	King's N. B	×
Mountain Grove	Addington O	×
Mountain Road	Pictou N. S	×
Mountain View	Prince Edward O	×
Mount Albert	York, N. R. O	500
Mount Albion	Wentworth, S. R. O	158
Mount Albion	Queen's P. E. I	×
* *Mount Brydges*	Middlesex, S. R. O	500
Mount Carmel	Kamouraska Q	×
Mount Charles	Peel O	×
Mount Chesney	Frontenac O	×
Mount Cossack	Cape Breton N. S	×
Mount Denison	Hants N. S	×
Mount Elgin	Norfolk, N. R. O	158
* *Mount Forest*	Wellington, N. R. O	2,500
Mount Hanley	Annapolis N. S	200
Mount Healy	Haldimand O	106
Mount Hope	Bruce, N. R. O	200
Mount Horeb	Victoria, S. R. O	×
Mount Irwin	Victoria, N. R. O	×
Mount Johnson	Iberville Q	×
Mount Lehman	N. Westminster B. C	×
Mount Loyal	Montcalm Q	×
Mount Maple	Argenteuil Q	×
Mount Middleton	King's N. B	×
Mount Oscar	Vaudreuil Q	×
Mount Pleasant	Durham, E. R. O	200
Mount Pleasant	Prince P. E. I	×
Mount Pleasant	Cumberland N. S	×
Mount Pleasant	Carleton N. B	×
Mount St. Louis	Simcoe, E. R. O	104
Mount St. Patrick	Renfrew, S. R. O	×
Mount Salem	Elgin, E. R. O	×
Mountsberg	Wentworth, N. R. O	×
Mount Sherwood	Carleton O	300
Mount Stewart	Queen's P. E. I	450
Mount Thom Sett'm't	Pictou N. S	×
Mount Uniacke	Hants N. S	×
Mount Vernon	Brant, S. R. O	250
Mount View	Westmoreland N. B	×
Mountville	Albert N. B	×
Mountville	Pictou N. S	×
Mount Whatley	Westmoreland N. B	175
Mount Wolf	Cardwell O	×
Mouth of Jemseg	Queen's N. B	×
Mouth of Keswick	York N. B	×
Mouth of Nerepis	King's N. B	×
Mouth of St. Francis	Victoria N. B	×
Mowbray	Selkirk M	×
Mud Bay	New Westminster B. C	×
Muddy Creek	Prince P. E. I	150
Muir Kirk	Elgin, W. R. O	×
Mulgrave	Welland O	×
Mull	Kent O	×
Mull River	Inverness N. S	×
Mullifarry	Middlesex, W. R. O	×
Mulmur	Simcoe, S. R. O	×
Muncey	Middlesex, S. R. O	×
Munroe's Bridge	Inverness N. S	×
Munroe's Mills	Glengarry O	×
Munster	Carleton O	×
Murchison	Marquette M	×
Murchison	Hastings, N. R. O	×
Murphyville	Halifax N. S	×
Murdoch	Grey, S. R. O	×
Murillo Station	Algoma O	×
Murray	Northumb'd, E. R. O	251
Murray Bay	Charlevoix Q	1,000
Murray Harbour, N.	King's P. E. I	100
Murray Harbour, R'd	Queen's P. E. I	100
Murray Harbour, S.	King's P. E. I	200
Murray River	King's P. E. I	150
Murray Road	Westmoreland N. B	×
Murray's Corner	Westmoreland N. B	×
Murvale	Addington O	114
Muskoka Falls	Ontario, N. R. O	106
Muskoka Mills	Simcoe, E. R. O	400
Musquash	St. John N. B	250
Musquodoboit Har.	Halifax N. S	1,151
Musselboro'	Selkirk M	×
Musselburg	Perth, N. R. O	×
Myrehall	Hastings, E. R. O	×
Myrtle	Ontario, S. R. O	156
Mystic	Missisquoi Q	150
Nackawick	York N. B	200
Nadeau's Crossing	Beauce Q	×
Nail Pond	Prince P. E. I	×
Nairn	Middlesex, N. R. O	110
Namur	Ottawa Q	×
Nanaimo	Vancouver B. C	1,800
Nanoose Bay	Vancouver B. C	×
Nanticoke	Haldimand O	200
Nantye	Simcoe, S. R. O	×
* *Napanee*	Lennox O	3,680
Napanee Mills	Addington O	350
Naphan	Hastings, E. R. O	×
Napier	Middlesex, W. R. O	250
Napierville	Napierville Q	×
Napucka	Selkirk M	×
Nappan	Cumberland N. S	156
Nappan Station	Cumberland N. S	×
Napperton	Middlesex, W. R. O	×
Narrows	Queen's N. B	150
Narrows Creek	King's P. E. I	×
Nashville	York, W. R. O	×
Nashwaak	York N. B	100
Nashwaak Bridge	York N. B	×
Nashwaaksis	York N. B	218
Nashwaak Station	York N. B	×
Nashwaak Village	York N. B	×
Nasonworth	York N. B	×
* *Nassagaweya*	Halton O	150
Natashquan	Saguenay Q	×
Nauwigewauk	King's N. B	100
Navan	Russell O	×
Necum Teuch	Halifax N. S	×
Neepawa	Marquette M	400
Neebing	Algoma O	300
Neguac	Northumberland N. B	156
Neigette	Rimouski Q	×
Neil's Harbour	Victoria N. S	×
Neilsonville	Quebec Q	×
Nelles Corners	Haldimand O	×
Nelson	Halton O	100
Nelson	Selkirk M	×
Nenagh	Grey, S. R. O	150
Nerepis Station	King's N. B	×
Netherby	Welland O	×
Neustadt	Grey, S. R. O	800
New Albany	Annapolis N. S	300
New Annan	Prince P. E. I	×
New Argyle	Queen's P. E. I	×
Newark	Oxford, S. R. O	×
New Armagh	Lotbiniere Q	×
New Bandon	Gloucester N. B	×
Newbliss	Brockville O	200
Newlands	Lotbiniere Q	×
* *Newboro'*	Leeds, S. R. O	500
New Boston	Cape Breton N. S	×
Newboyne	Leeds, S. R. O	×
Newbridge	Huron, E. R. O	100
* *Newburgh*	Addington O	1,000
Newburgh	Carleton N. B	200
Newburn	Lunenburg N. S	×
* *Newbury*	Middlesex, W. R. O	700
New Campbellton	Victoria N. B	×
New Canaan	Queen's N. S	×
New Canada	Lunenburg N. S	×
New Carlisle	Bonaventure Q	500
New Carlow	Hastings, N. R. O	×
* *Newcastle*	Durham, W. R. O	950
Newcastle	Northumberland N. B	2,500
Newcastle Bridge	Queen's N. B	100
Newcastle Creek	Queen's N. B	100
Newcomb Corner	Halifax N. S	×
Newcomb	Lunenburg N. S	×
Newcomb Mills	Northumberl'd, E. R. O	300
New Cornwall	Lunenburg N. S	×
Newdale	Marquette M	×
New Dublin	Brockville O	×
New Dundee	Waterloo, S. R. O	300
New Durham	Oxford, S. R. O	150
* *New Edinburgh*	Russell O	1,000
New Edinburgh	Digby N. S	×
New Elm	Lunenburg N. S	×
New Gairloch	Pictou N. S	×
New Germany	Waterloo, N. R. O	150
New Glasgow	Queen's P. E. I	150
New Glasgow	Terrebonne Q	300
New Glasgow	Pictou N. S	3,000
New Grafton	Queen's N. S	×
* *New Hamburg*	Waterloo, S. R. O	1,300
New Harbour	Guysborough N. S	×
New Harris	Victoria N. S	×
Newhaven	Selkirk M	×
New Haven	Queen's P. E. I	×
New Haven	Victoria N. S	×
Newholm	Muskoka & P. S'd O	×
New Horton	Albert N. B	150
Newington	Stormont O	300
New Ireland	Megantic Q	×
New Ireland	Albert N. B	×
New Ireland Road	Albert N. B	×
New Jerusalem	Queen's N. B	250
New Larig	Pictou N. S	150
New Liverpool	Levis Q	2,000
New London	Queen's P. E. I	×
New Lowell	Simcoe, N. R. O	250
* *New Market*	Ontario, W. R. O	2,400
New Market	York N. B	×
New Maryland	York N. B	485
New Mills	Restigouche N. B	216
New Minas	King's N. S	150
New Oxley	Alta	×
New Park	Durham, E. R. O	×
New Perth	King's P. E. I	150
Newport	Brant, S. R. O	150
Newport	Gaspe Q	200
Newport	Hants N. S	×
Newport	King's P. E. I	×
Newport Corner	Hants N. S	×
Newport Landing	Hants N. S	×
Newport Point	Gaspe Q	×
Newport Station	Hants N. S	×
New Richmond	Bonaventure Q	250
New River Mills	Charlotte N. B	×
New Rockland	Richmond Q	×
New Ross	Dundas	120

Longitude West from Greenwich
49
48
47
76
77
78
79
Lake Pashagama
Lake Eshcakami
OTTAWA RIVER
Lake Bouchette
Lake Barriere
Mission
R. Kapitashewinna
Lake Kaackequancka
Lake Oiacquamo
R. Shesheiagiuanna
Mission Fort de la Grande d'Hudson
Lake Wapousanane
Lake Gaolunaya
Lake Ooababi
Lake Kimewaya
B. des Lis
OTTAWA
OTTAWA RIVER
Lake Kijiquoaja
Lake des Quinze
Lake Obikoba
Lake Opasitika
Lake Ajotawekami
Lake ataouagosig
Chute
GRAND LAKE
Lake Grassy
Lake Opasigaba
L. Wolf
Lake Kowjorish
Lake Birch
Lake Ostaboiningue
R. Anthinanika
R. Pin blanc
Rapid Lake
Lake aux Loups
Lake aux Ecorces
LAKE KAKIBONGA
Lake Travers
Chutes
Poigan Lakes
R. Kakebonga
Fort de la Cie d'Hudson
R. des Sauterelles
R. des Seize
R. Jean de Terre
R. Jean de Terre plutot R. Gens de Terre
Chutes 30
Chute 25
Chute 50
Old Man's Creek
Serpent Fall
Rapide Fort de F
Chute a l'Etury
R. Natuaganssi
Lake Island
Lake Windfall
Lake Autostaguane
R. Carpe
R. Serpent
River Kippewa



WESTERN PART OF QUEBEC

Geo. F. Cram, Engraver,

Chicago, Ill.

SCALE OF MILES.
0 2 4 6 8 10 15 20 30 40
Longitude West from Washington
47
46
45
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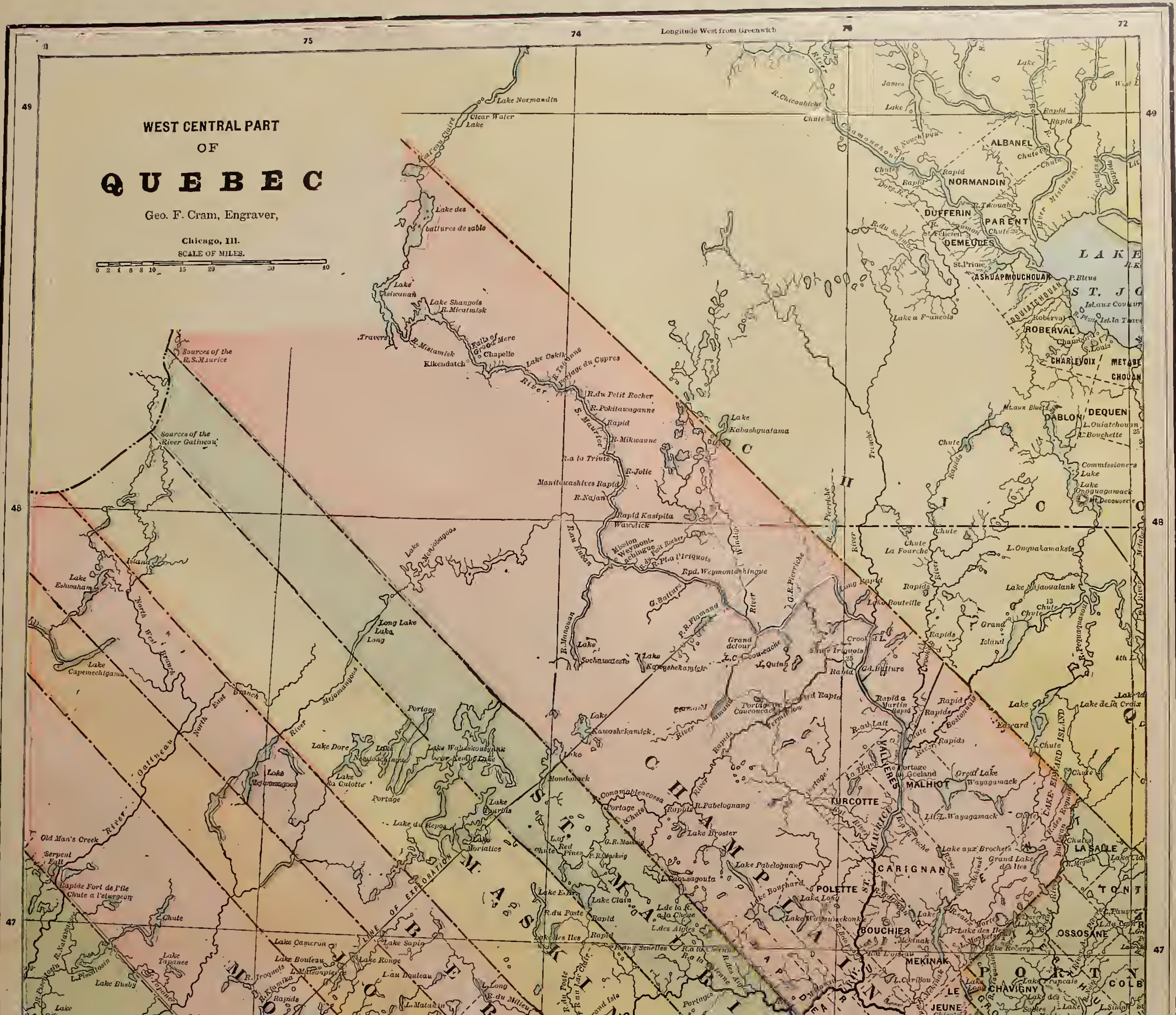
P O N T I A C
O T T A W A
O N T A R I O
R E N F R E W
C A R L E T O N
L A N A R K
OTTAWA
HULL
PEMBROKE
ARNPRIOR
Coulonge River
River du Moine
OTTAWA RIVER
CANADIAN PACIFIC
KINGSTON
PEMBROKE

LIST OF POST OFFICES IN CANADA.

POST OFFICE.	ELECTORAL DISTRICT.	POP.
New Ross	Lunenburg N. S	[illegible]
New Ross Road	King's N. S	
Newry	Perth, N. R. O	450
New Salem	Cumberland N. S	×
New Sarum	Elgin, E. R. O	×
Newton	Perth, N. R. O	×
Newton	Prince P. E. I	×
Newton Brook	York, W. R. O	250
Newton Cross	Queen's P. E. I	×
Newton Mills	Colchester N. S	×
Newton Robinson	Simcoe, S. R. O	150
New Town	Guysboro' N. S	×
New Town	King's N. B	150
New Tusket	Digby N. S	×
Newville	Cumberland N. S	×
New Westminster	N. Westminster B. C	6,641
New Wiltshire	Queen's P. E. I	×
New Zealand	King's P. E. I	×
New Zion	Sunbury N. B	×
* *Niagara*	Lincoln & Niagara O	1,450
* *Niagara Falls*	Welland O	4,000
* *Niagara Falls, S'th*	Welland O	1,000
Nicola Lake	Yale B. C	125
* *Nicolet*	Nicolet Q	2,200
Nicolet Falls	Richmond Q	150
Nicolston	Simcoe, S. R. O	×
Nictaux Falls	Annapolis N. S	×
Nile	Huron, W. R. O	100
Nilestown	Middlesex, E R. O	300
Nimitau	Selkirk M	×
Nine Mile Creek	Queen's P. E. I	×
Nine Mile River	Hants N. S	×
Ninette	Selkirk M	×
Ninga	Selkirk M	×
Nipissing	Muskoka O	100
Nissouri	Oxford, N. R O	×
Nithburg	Oxford, N. R. O	100
Niverville	Provencher M	×
Nixon	Norfolk, N. R. O	200
Nixon	Albert N. B	×
Nober	Haldimand O	×
* *Nobleton*	York O	200
Noel	Hants N. S	300
Noel Road	Hants N. S	×
Noel Shore	Hants N. S	×
Norborough	Prince P. E. I	×
Norcliffe	Pontiac Q	×
Norham	Northumberland, E. R. O	250
Norland	Victoria, N. R. O	1,500
Normandale	Norfolk, S. R. O	100
Norquay	Selkirk M	×
Normandin	Chicoutimi Q	×
North Alton	King's N. S	×
North Arm	N. Westminster B. C	×
Northam	Prince P. E. I	×
Northampton	Carleton N. B	×
North Augusta	Grenville, S. R. O	500
North Bay	Nipissing Dist. O	×
North Beaver Bank	Halifax N. S	×
North Bedeque	Prince P. E. I	×
North Branch	Russell O	×
North Brookfield	Queen's N. S	×
North Bruce	Bruce, W. R O	×
North Buxton	Kent O	100
North Carleton	Prince P. E. I	×
North Clarendon	Pontiac Q	×
North Coaticooke	Stanstead Q	×
Northcote	Renfrew, S. R. O	×
N. E. Br., Margaree	Inverness N. S	135
N. E. Harbour	Shelburne N. S	250
N. End Lochab. Lake	Antigonishe N. S	×
N. Esk Boom	Northumberland N. B	518
Northfield	Cornwall O	×
Northfield	Sunbury N. B	×
Northfield	Lunenburg N. S	250
Northfield Centre	Oxford, S. R. O	200
North Forks, Sal. Cr.	Sunbury N. B	×
North Framboise	Richmond N. S	×
North Georgetown	Chateauguay Q	×
North Glanford	Wentworth, S. R. O	175
* *North Gower*	Carleton O	300
North Grant	Antigonishe N. S	×
North Greenville	Cumberland N. S	×
North Gut, St. Anne's	Victoria N. S	×
North Ham	Wolfe Q	200
North Hatley	Stanstead Q	100
North Hill	Compton Q	×
North Intervale	Guysboro' N. S	×
North Keppel	Grey, N. R. O	120
North Lake	King's P. E. I	×
North Lake	York N. B	×
North Lancaster	Glengarry O	250
North Low	Ottawa Q	×
North Meadford	King's N. S	×
North Milton	Queen's P. E. I	×
North Mountain	Dundas O	125
North Mountain	King's N. S	×
North Nation Mills	Ottawa Q	200
North Onslow	Pontiac Q	120
North Pelham	Monck O	×
North Pinnacle	Missisquoi Q	200
* *North Port*	Prince Edward O	250
Northport	Cumberland N. S	100
North Range Corner	Digby N. S	×
North Renous	Northumberland N. B	×
North Ridge	Essex, S. R. O	250
North River	Queen's P. E. I	×
North River	Westmoreland N. B	×
North River	Colchester N. S	300
N. River Bridge	Colchester N. S	×
N. River Bridge	Victoria N. S	×
North River Platform	Westmoreland N. B	×
North Rustico	Queen's P. E. I	×
North Saanich	Vancouver B. C	300
North Salem	Hants N. S	×
North Seneca	Haldimand O	×
North Seguin	Muskoka & P S'd O	×
North Shore	Cumberland N. S	×
North Shore	Victoria N. S	×
N. S. St. Marg. Bay	Halifax N. S	×
N. Sec. of Earltown	Colchester N. S	×
North Stanbridge	Missisquoi Q	250
North Stoke	Richmond Q	×
North Stukely	Shefford Q	400
North Sutton	Brome Q	×
* *North Sydney*	Cape Breton N. S	2,500
North Tyron	Prince P. E. I	×
North Valley	Stormont O	×
North Wakefield	Ottawa Q	350
North West	Lunenburg N. S	×
North West Arm	Cape Breton N. S	×
North West Bridge	Northumberland N. B	×
North West Cove	Lunenburg N. S	×
North Williamsburg	Dundas O	300
North Winchester	Dundas O	×
Norton	King's N. B	215
North Wolfstown	Wolfe Q	×
Northwood	Kent O	×
Norton Creek	Chateauguay Q	250
Norton Dale	[illegible]	[illegible]
Norton Station	King's P. E. I	×
Nortonville	Peel O	×
Norval	Halton O	400
Norway	York, E. R. O	300
* *Norwich*	Oxford, S. R. O	1,600
* *Norwood*	Peterboro', E. R. O	1,100
Norwood	Yarmouth N. S	×
Nosbonsing	Dis. of Algoma O	×
N. Dame des Anges	Portneuf Q	×
N. Dame du Laus	Ottawa Q	×
N. Dame de l'I. Verte	Temiscouata Q	×
Notre Dame de Grace	Hochelaga Q	300
Notre Dame de Bets.	Saguenay Q	×
Notre Dame des Bois	Compton Q	×
Not. Dame de la Sal	Ottawa Q	200
Notre Dame du Lac	Temiscouata Q	200
N. D. du Pont Main	Ottawa Q	×
Notre Dame du Port	Temiscouata Q	×
Notre Dame de Rim	Rimouski Q	×
Notre Dame de Stan	Missisquoi Q	×
Nottawa	Simcoe, N. R. O	300
Nouvelle	Bonaventure Q	400
Novar	Muskoka & P. S'd O	100
Noyan	Missisquoi Q	400
Nugent	Hastings, N. R. O	×
Nutt's Corners	Missisquoi Q	×
Nuttby	Colchester N. S	×
Nyanza	Victoria N. S	×
Oak Bank	Lisgar M	×
Oak Bay	Charlotte N. B	756
Oakburn	Marquette M	×
Oakfield	Halifax N. S	×
Oakham	Queen's N. B	×
Oak Hill	Victoria, N. R. O	×
Oak Hill	Charlotte N. B	250
Oak Lake	Selkirk M	×
Oakland	Oxford, S. R. O	200
Oakland	Marquette M	×
Oak Leaf	Leeds, S. R. O	×
Oak Park	Shelburne N. S	×
Oak Point	Bonaventure Q	×
Oak Point	King's N. B	200
Oak Point	Northumberland N. B	×
Oak Point	Lisgar M	150
Oak Ridges	Ontario, W. R. O	×
Oak River	Marquette M	×
* *Oakville*	Halton O	1,700
Oakville	Carleton N. B	×
Oakwood	Victoria, S. R. O	250
Oates	Frontenac O	×
Oban	Richmond N. S	×
Oberon	Marquette M	×
O'Connell	Pontiac Q	×
Oconto	Addington O	×
Odell	Middlesex, E. R. O	×
Odelltown	St. John's Q	×
* *Odessa*	Lennox O	700
Offa	Middlesex, N. R. O	100
Ogden	Guysboro' N. S	×
Ogemah	Lambton, W. R. O	×
Ogilvie	King's N. S	×
Ohio	Antigonishe N. S	400
Ohsweken	Brant, S. R. O	×
Oil City	Lambton, E. R. O	600
* *Oil Springs*	Lambton, E. R. O	600
Oka	Two Mountains Q	500
Okanagon	Yale B. C	300
Okanagon Mission	Yale B. C	×
Okotoks	Alberta Territory	×
Old Barns	Colchester N. S	×
Oldcastle	Essex, N. R. O	×
Old Chelsea	Ottawa Q	×
Oldfield	Bothwell O	×
Oldham	Halifax N. S	150
Old Lake Road	Temiscouata Q	×
O'Leary Road	Prince P. E. I	×
O'Leary Station	Prince P. E. I	×
Olinda	Essex, S. R. O	200
Olinville	Queen's N. B	×
Oliphant	Bruce, N. R. O	×
Olive	Marquette M	×
Oliver	Oxford, N. R. O	×
Oliver	Stanstead Q	×
Oliver's Ferry	Lanark, S. R. O	×
Olivet	Wellington, N. R. O	×
Omagh	Halton O	100
* *Omemee*	Victoria, S. R. O	750
Ompah	Addington O	100
150 Mile House	Cariboo B. C	150
Oneida	Haldimand O	×
Onondaga	Brant, S. R. O	600
Onslow Mountain	Colchester N. S	×
Onslow Station	Colchester N. S	×
Ojmwaka	Selkirk M	×
Opemican	Pontiac Q	×
Orangedale	Inverness N. S	×
Orange Ridge	Marquette M	×
* *Orangeville*	Wellington, C. R. O	3,200
Oranmore	Muskoka & P. S'd O	×
Orchard	Grey, S. R. O	200
Oriel	Oxford, S. R. O	×
Orkney	Wentworth, N. R. O	×
* *Orillia*	Simcoe, E. R. O	4,500
Orleans	Russell O	×
Ormond	Dundas O	×
Ormsby	Hastings, N. R. O	×
Ormstown	Chateauguay Q	800
Oromocto	Sunbury N. B	500
* *Orono*	Durham, W. R. O	1,000
Oro Station	Simcoe, E. R O	×
Orr Lake	Simcoe, E. R. O	×
Orton	Wellington, C. R. O	×
Ortonville	Victoria N. B	×
Orwell	Elgin, E. R. O	300
Orwell	Queen's P. E. I	250
Orwell Cove	Queen's P. E. I	×
Orrwold	Marquette M	×
Osaca	Durham, E. R O	×
Osborne	Lambton, W. R. O	×
* *Osceola*	Renfrew, N. R. O	150
Osgoode Station	Russell O	×
* *Oshawa*	Ontario, S. R O	4,500
Osman	Middlesex, W. R O	×
Oso Station	Addington O	×
Osoyoos	Yale & Kootenay B. C	×
Osprey	Marquette M	×
Ospringe	Wellington, S. R. O	×
Ossa	Addington O	×
Ossekeag	King's N. B	×
Ossian	Lambton, E. R. O	×
Ossawa	Lisgar M	×
Ostrander	Norfolk, N. R. O	×
Otenaw	Selkirk M	×
Otnabog	Queen's N. B	×
* *Ottawa*	Ottawa O	44,154
Otterburne	Provencher M	×
Otter Lake	Pontiac Q	200
* *Otterville*	Oxford, S. R. O	700
[illegible]	[illegible] O	×
Oustic	Wellington, C. R. O	×
Outer Duck Island	Algoma O	×
Outer Isl'd Port Hood	Inverness N. S	×
Outremont	Hochelaga Q	×
Ouvry	Kent O	×
Overton	Addington O	×
Overton	Yarmouth N. S	×
* *Owen Sound*	Grey, N. R O	7,497
Owl's Head Harbour	Halifax N. S	×
Oxenden	Grey, N. R O	125
* *Oxford*	Cumberland N. S	900
Oxford Centre	Oxford, S. R O	×
Oxford Mills	Grenville, N R. O	400
Oxford Station	Grenville, N. R. O	×
Oxley	Essex, S. R. O	200
Oxmead	Grey, E. R. O	×
Oyster Bed Bridge	Queen's P. E.	×
Oyster Ponds	Guysborough N. S	100
Oznabruck Centre	Stormont O	400
Paddock	King's N. B	×
Painchaud	Megantic Q	×
Painsec	Westmoreland N. B	×
Painswick	Simcoe, S. R. O	100
* *Paisley*	Bruce, N. R. O	1,400
* *Pakenham*	Lanark, N. R. O	603
Palermo	Halton O	100
Palgrave	Cardwell O	153
Palmer Rapids	Renfrew, S. R. O	×
Palmer Road	Prince P. E. I	×
* *Palmerston*	Wellington, N. R. O	2,000
Palmyra	Elgin, W. R. O	×
Panmure	Lanark, N. R. O	450
Papineauville	Ottawa Q	1,000
Paquette	Compton Q	×
Paradise Lane	Annapolis N. S	×
Parents	Victoria N. B	×
Parham	Addington O	×
Park Corner	Queen's P. E. I	×
* *Paris*	Brant, N. R. O	3,400
Paris Station	Brant, N. R. O	×
Parisville	Lotbiniere Q	600
Parker	Wellington, C. R. O	107
Parkdale	Lisgar M	×
Parkdale	York, W. R. O	3,500
Parker's Cove	Annapolis N. S	×
Parker's Ridge	York N. B	×
Park Head	Bruce, N. R. O	×
* *Park Hill*	Middlesex, N. R. O	2,000
Parkhurst	Lotbiniere Q	175
Parkin	Assa	×
Parkisimo	Marquette M	×
Parklands	Assa	×
Park's Creek	Lunenburg N. S	×
Parlee Settlement	King's N. B	×
Parma	Lennox O	×
Parrsborough	Cumberland N. S	1,000
Parrsborough Shore	Cumberland N. S	×
Parry Harbour	Muskoka & Parry S. O	×
Parry Sound	Muskoka & P. S'd O	2,000
Partridge Island	Cumberland N. S	×
Paspebiac	Bonaventure Q	1,000
Passekeag	King's N. B	156
Pasteur	Chicoutimi Q	×
Pasqua	Assa	×
Patillo	Essex, N. R O	107
Patterson	York, W. R. O	240
Patterson Settlement	Sunbury N. B	×
Paudash	Peterboro', E. R. O	×
Pauline	Rouville Q	×
Pavillion	Cariboo B. C	×
Peabody	Grey, N. R. O	×
Peake Station, No. 38	King's P. E. I	×
Pearceley	Muskoka & Par. S. O	×
Pearceton	Missisquoi Q	×
Pearson's	King's N. B	×
Peebles	Oxford, S. R. O	×
Peel	Carleton N. B	186
Peepabun	Wellington, N. R. O	×
Pefferlaw	York, N. R. O	157
Peggy's Cove	Halifax N. S	100
Peguis	Lisgar M	×
Pekisko	Alta	×
Pelee Island	Essex, S. R. O	450
Pelee Island, East	Essex, S. R. O	×
Pelee Island, South	Essex, S. R. O	×
Pelissier	Ottawa Q	250
Pelham Union	Monck O	×
Pembroke	Hants N. S	×
* *Pembroke*	Renfrew, N. R. O	2,850
Pembroke	Carleton N. B	×
Pembroke Shore	Yarmouth N. S	×
Pendennis	Selkirk M	×
Pendleton	Prescott O	×
* *Penetanguishene*	Simcoe, S. R. O	2,000
Pengarth	Assa	×
Penniac	York N. B	×
Peninsula-Gaspe	Gaspe Q	×
Peninsula Harbour	Algoma O	×
Pennfield	Charlotte N. B	998
Pennfield Ridge	Charlotte N. B	×
Penobsquis	King's N. B	100
Penrith	Selkirk M	×
Pense	Assa	×
Pentecost River	Saguenay Q	×
Pentland	Wellington, C. R. O	×
Penville	Simcoe, E. R. O	100
* *Perce*	Gaspe Q	400
Perch Station	Lambton, W. R. O	×
Perivale	Algoma O	×
Perkins	Ottawa Q	×
Perm	Simcoe, S. R. O	×
Perretton	Renfrew, N. R. O	×
Perolt Settlement	Annapolis N. S	×
Perryboro'	Compton Q	×
Perry Settlement	King's N. B	×
Perry	Addington O	×
Perrytown	Durham, E. R. O	156
* *Perth*	Lanark, S. R. O	2,475
Perth	Victoria N. B	×
Perth Centre	Victoria N. B	200
Perth Road	Addington O	×
Petawawa	Renfrew, N. R. O	×
* *Peterborough*	Peterboro', W. R. O	9,717
Petersburg	Waterloo, S. R. O	150
Peter's Road	King's P. E. I	×
Peterson's Corners	Victoria, N. R. O	×
Petersville	Queen's N. B	×
* *Petersville*	London O	1,500
Petersville Church	Queen's N. B	200
Peterville	Prince P. E. I	×
Petherton	Wellington, N. R. O	×
Petitcodiac	Westmoreland N. B	450
Petite de Grat	Richmond N. S	340
Petite Lameque	Gloucester N. B	×
Petite Matane	Rimouski Q	450
Petite Riv. Bridge	Lunenburg N. S	×
Petite Vallee	Gaspe Q	×
Petit Rocher	Gloucester N. B	250
Petits Mechins	Rimouski Q	100
Petpeswick Harbour	Halifax N. S	×
Petrel	Marquette M	×
* *Petrolea*	Lambton, E. R. O	4,500
Petworth	Addington O	×
Pevensey	Muskoka & P. S'd O	×
Peveril	Vaudreuil Q	×
Pheasant Forks	Assa	×
Phelpston	Simcoe, N. R. O	300
Philipsburg, East	Missisquoi Q	300
Philipsburg, West	Waterloo, S. R. O	100
Philipston	Hastings, E. R. O	×
Philipsville	Leeds, S. R. O	300
* *Pickering*	Ontario, W. R. O	1,000
* *Picton*	Prince Edward O	3,200
Pictou	Pictou N. S	1,500
Pictou Island	Pictou N. S	×
Pictou Landing	Pictou N. S	100
Piedmont	Terrebonne Q	250
Piedmont Valley	Pictou N. S	×
* *Pierreville*	Yamaska Q	500
Pierreville Mills	Yamaska Q	×
Pierston	King's N. B	×
Pigeon Hill	Missisquoi Q	270
Pigeon Lake	Lisgar M	×
Pike Bay	Bruce, N. R. O	×
Pike Creek	Essex, N. R. O	×
Pike River	Missisquoi Q	220
Pilot Mound	Selkirk M	400
Pincher Creek	Alta	300
Pine Dale	Ontario, N. R. O	×
Pinedale	Antigonishe N. S	×
Pine Grove	York, W. R. O	100
Pine Orchard	Ontario, W. R. O	×
Pine Ridge	Kent N. B	×
Pine River	Bruce, W. R. O	×
Pinette	Queen's P. E. I	×
Pine Tree	Pictou N. S	×
Pinkerton	Bruce, E. R. O	100
Pioneer	Carleton N. B	×
Piopolis	Compton Q	400
Pipestone	Selkirk M	×
Pirate Harbour	Guysboro' N. S	120
Pisarinco	St. John N. B	×
Pisquid	Queen's P. E. I	150
Pisquid Road	Queen's P. E. I	×
Pitt's Ferry	Frontenac O	×
Pittston	Grenville, S. R. O	×
Piusville	Prince P. E. I	×
Plainfield	Hastings, E. R. O	250
Plainfield	Pictou N. S	100
Plainville	Northumberland, W. R. O	×
Plaisance	Ottawa Q	200
* *Plantagenet*	Prescott O	200
Plaister Mines	Victoria N. S	×
* *Plattsville*	Brant, N. R. O	800
Playfair	Lanark, S. R. O	×
Pleasant Bay	Inverness N. S	×
Pleasant Grove	Queen's P. E. I	×
Pleasant Harbour	Halifax N. S	×
Pleasant Home	Lisgar M	×
Pleasant Lake	Yarmouth N. S	×
Pleasant Point	Halifax N. S	×
Pleasant Ridge	Charlotte N. B	×
Pleasant River	Queen's N. S	250
Pleasant Vale	Albert N. B	×
Pleasant Valley	Digby N. S	×
Pleasant Valley	Pictou N. S	×
Pleasant Valley	Yarmouth N. S	×
Pleasant Valley	Dundas O	×
Pleasantville	Lunenburg N. S	×
Plevna	Addington O	200
Plover Mills	Middlesex, E. R O	×
Plum Hollow	Leeds, S. R O	×
Plumper Pass	Vancouver B. C	×
Plymouth Road	Pictou N. S	×
Plymouth	Yarmouth N. S	×
Plymouth	Carleton N. B	×
Plympton	Selkirk M	×
Plymton	Digby N. S	×
Pockmouche	Gloucester N. B	100
Pockshaw	Gloucester N. B	300
Pocologan	Charlotte N. B	×
Point Aconi	Cape Breton N. S	×
Point Alexander	Renfrew, N. R. O	×
Point au Car	Northumberland N. B	×
Point Clear	Victoria N. S	×
Pointe a Pic	Charlevoix Q	×
Pointe au Bouleau	Saguenay Q	×
Pointe au Chene	Argenteuil Q	250
Pointe aux Pins	Algoma O	×
Pointe aux Trembles	Hochelaga Q	400
Pointe aux Trembles	Portneuf Q	1,500
Pointe aux Orignaux	Kamouraska Q	×
Pointe Bleue	Chicoutimi Q	250
Pointe Claire	Jacques-Cartier Q	500
Pointe de Bute	Westmoreland N. B	250
Pointe du Chene	Westmoreland N. B	150
Pointe du Lac	St. Maurice Q	700
Point Edward	Lambton, W. R. O	2,300
Point Edward	Cape Breton N. S	×
Point Escuminac	Northumberland N. B	×
Pointe Seche	Kamouraska Q	×
Point Fortune	Vaudreuil Q	500
Point Kaye	Simcoe, E. R. O	×
Point la Nim	Restigouche N. B	×
Point Michaud	Richmond N. S	×
Point of Cape	Antigonishe N. S	×
Point Petre	Prince Edward Q	×
Point Platon	Lotbiniere Q	×
Point Poplar	King's P. E. I	×
Point Prim	Queen's P. E. I	×
* *Point St. Charles*	Montreal Centre Q	5,000
Point St. Peter	Gaspe Q	120
Point Sapin	Kent N. B	×
Point Travers	Prince Edward O	×
Point Wolfe	Albert N. B	×
Poirier	Kent N. B	×
Poland	Lanark, N. R. O	×
Pollett River	Westmoreland N. B	×
Polleyburst	Queen's N. B	×
Polmont	Northumberland, E. R. O	×
Poltimore	Ottawa Q	×
Pomeroy	Selkirk M	×
Pomeroy Ridge	Charlotte N. B	×
Pomona	Grey, S. R. O	×
Pomquet Chapel	Antigonishe N. S	×
Ponds	Pictou N. S	×
Pond Mills	Middlesex, S. R. O	×
Ponsonby	Wellington, C. R. O	×
Pont Chateau	Soulanges Q	200
Pont de Maskinonge	Maskinonge Q	800
Pont Rouge	Portneuf Q	×
Pontypool	Durham, E. R. O	×
Pont Viau	Laval Q	×
Poodiac	King's N. B	×
Poole	Perth, N. R. O	×
Poplar	Algoma O	×
Poplar Grove	Algoma O	×

LIST OF POST OFFICES IN CANADA.

POST OFFICE.	ELECTORAL DISTRICT.	POP.
Poplar Hill	Pictou N. S	×
Poplar Hill	Middlesex, S. R. O	×
Poplar Point	Marquette M	×
Poquiock	York N. B	150
Port Acadie	Digby N. S	×
* *Portage du Fort*	Pontiac Q	600
* *Portage la Prairie*	Marquette M	2,200
Portage River	Northumberland N. B	100
Port Albert	Huron, W. R. O	×
Port Alma	Kent O	×
* *Port Arthur*	Algoma O	4,500
Portapique	Colchester N. S	200
Portapique Mountain	Colchester N. S	×
Portapique Rear	Colchester N. S	×
Port au Persil	Charlevoix Q	×
Port Bickerton	Guysboro' N. S	×
Port Bruce	Elgin, E. R. O	250
* *Port Burwell*	Elgin, E. R. O	875
Port Caledonia	Cape Breton N. S	150
Port Carling	Simcoe, E. R. O	200
Port Clyde	Shelburne N. S	×
Port Cockburn	Muskoka & P. S'd O	×
* *Port Colborne*	Welland O	1,500
Port Credit	Peel O	600
* *Port Dalhousie*	Lincoln O	1,000
Port Daniel	Bonaventure Q	500
* *Port Dover*	Norfolk, S. R. O	1,100
* *Port Elgin*	Bruce, W. R. O	1,500
Port Elgin	Westmoreland N. B	150
Port Elmsley	Lanark, S. R. O	200
Porter's	St. John N. B	×
Porter's Hill	Huron, S. R. O	×
Porter's Lake	Halifax N. S	×
Port Finlay	Algoma O	300
Port Felix	Guysborough N. S	×
Port Franks	Lambton, E. R. O	100
Port George	Annapolis N. S	200
Port Granby	Durham, W. R. O	×
Port Greville	Cumberland N. S	250
Port Hammond	N. Westminster B. C	×
Port Haney	N. Westminster B. C	×
Port Hastings	Inverness N. S	600
* *Port Hawkesbury*	Inverness N. S	600
Port Hilford	Guysborough N. S	×
Port Hill	Prince P. E. I	150
Port Hood	Inverness N. S	700
Port Hood Island	Inverness N. S	×
* *Port Hope*	Durham, E. R. O	5,042
Port Howe	Cumberland N. S	×
Port Joli	Queen's N. S	×
Port Lambton	Bothwell O	350
Portland	Leeds, S. R. O	100
Portland	St. John N. B	12,520
Port la Tour	Shelburne N. S	210
Port Lewis	Huntingdon Q	130
Port Lorne	Annapolis N. S	300
Port Maitland	Monck O	×
Port Maitland	Yarmouth N. S	×
Port Mouton	Queen's N. S	×
Port Medway	Queen's N. S	600
Port Moody	N. Westminster B. C	285
Port Mulgrave	Guysborough N. S	400
Port Nelson	Halton O	×
Portneuf	Portneuf Q	1,500
Portneuf Station	Portneuf Q	×
* *Port Perry*	Ontario, N. R. O	2,000
Port Philip	Cumberland N. S	×
Port Richmond	Richmond N. S	×
* *Port Robinson*	Welland O	500
* *Port Rowan*	Norfolk, S. R. O	1,000
Port Royal	Norfolk, S. R. O	100
Port Royal	Richmond N. S	100
Port Ryerse	Norfolk, S. R. O	150
Port Sandfield	Simcoe, E. R. O	×
Port Severn	Simcoe, E. R. O	×
Portsmouth	Frontenac O	1,700
* *Port Stanley*	Elgin, E. R. O	800
* *Port Sydney*	Muskoka & P. S'd O	×
Port Talbot	Elgin, W. R. O	×
Portuguese Cove	Halifax N. S	×
Port Union	Ontario, W. R. O	×
Port Williams	King's N. S	150
Port Williams Station	King's N. S	150
Pottageville	York, N. R. O	×
Powassan	Muskoka & P. S'd O	×
Powell	Lanark, N. R. O	×
Powerscourt	Huntingdon Q	200
Power's Creek	Victoria N. B	×
Pownall	Queen's P. E. I	150
Prairie Grove	Provencher M	×
Pre d'en haut	Westmoreland N. B	×
Preneveau	Peterboro', E. R. O	×
* *Prescott*	Grenville, S. R. O	3,000
Presqu' Isle	Grey, N. R. O	100
* *Preston*	Waterloo, S. R. O	1,800
Preston	Selkirk M	×
Price's Corner	Simcoe, E. R. O	×
Priceburgh	Victoria N. B	×
Priceville	Grey, S. R. O	350
Priest Pond	King's P. E. I	×
Priest's Valley	Yale-Kootenay B. C	×
Primrose	Cardwell O	×
Prince Albert	Sask	6,000
Prince Albert	Ontario, S. R. O	400
Prince Albert	Annapolis N. S	×
Prince of Wales	St. John N. B	150
Princeport	Colchester N. S	×
* *Princeton*	Brant, N. R. O	500
Princetown	Prince P. E. I	×
Princetown Road	Queen's P. E. I	×
Princeville	Inverness N. S	×
Prince William	York N. B	200
Prince William Station	York N. B	×
Prinyer	Prince Edward O	×
Prospect	Lanark, S. R. O	×
Prospect	Halifax N. S	700
Prosser Brook	Albert N. B	×
Protectionville	Northumberland N. B	×
Proton Station	Grey, E. R. O	×
Providence Bay	Algoma O	150
Public Landing	King's N. B	×
Pubnico Beach	Shelburne N. S	×
Pubnico Harbour	Yarmouth N. S	1,600
Puckahn	Sask	×
Pugh's Crossing	York N. B	×
* *Pugwash*	Cumberland N. S	700
Pugwash River	Cumberland N. S	×
Purbrook	Ontario, N. R. O	×
Purdy	Hastings, N. R. O	×
Purlbrook	Antigonishe N. S	×
Purple Grove	Bruce, S. R. O	×
Purple Hill	Durham, W. R. O	×
Purple Valley	Bruce, N. R. O	×
Purpleville	York, W. R. O	×
Puslinch	Wellington, S. R. O	120
Putnam	Middlesex, E. R. O	200
Quaco Road	St. John N. B	×
Quadra	Vancouver B. C	×
Quai des Eboulem'ns	Charlevoix Q	×
Quai de Rimouski	Rimouski Q	×
Quamichan	Vancouver B. C	×
Qu' Appelle	Assa	500
Qu' Appelle Station	Assa	×
* *Quebec*	Quebec Q	63 000
Queensborough	Hastings, N. R. O	200
Queensbury	York N. B	×
Queen Hill	Bruce, W. R. O	×
Queenston	Lin. & Niagara O	250
Queensville	York, N. R. O	200
Queensville	Inverness N. S	×
Queensville	King's N. B	×
Quesnelle	Cariboo B. C	126
Quesnelle Forks	Cariboo B. C	×
Quilchena	Yale B. C	×
Quinan	Yarmouth, N. S. O	×
Quinn	Kent O	×
Quinnville	Ottawa Q	×
Quisibus	Victoria N. B	×
Quispamsis	King's N. B	×
* *Quyon*	Pontiac Q	800
Rabbit Mountain	Algoma O	100
Radford	Pontiac Q	100
Radstock	Joliette Q	×
Ragged Head	Guysboro' N. S	×
Ragged Island	Shelburne N. S	×
Raglan	Ontario, S. R. O	100
Railton	Addington O	×
Rainy River	Algoma O	×
Rainham	Haldimand O	×
Rainham Centre	Haldimand O	200
Ralphtown	Selkirk M	×
Rama	Ontario, N. R. O	×
Ramsay's Corners	Russell O	×
Ramsay	Colchester N. S	×
Randboro	Compton Q	×
Randwick	Simcoe, S. R. O	×
Randolph	Simcoe, E. R. O	×
Ranelagh	Norfolk, N. R. O	×
Rankin	Renfrew, N. R. O	×
Rannock	Pontiac Q	×
Raper	Middlesex, S. R. O	×
Rapide de Femme	Victoria N. B	×
Rapid City	Marquette M	700
Rapids des Joachims	Pontiac Q	×
Rathburn	Ontario, N. R. O	×
Ratho	Oxford, N. R. O	100
Ratigan	York N. B	×
Ratter's Corner	King's N. B	×
Rat Portage	Algoma O	700
Raven Lake	Marquette M	×
Ravenna	Grey, E. R. O	110
Ravenscliffe	Muskoka & P. S'd O	×
Raven's Glen	Marquette M	×
Ravenshoe	York, N. R. O	×
Ravenswood	Lambton, E. R. O	×
Ravensworth	Muskoka & P. S'd O	×
Rawdon	Montcalm Q	300
Rawdon	Hants N. S	250
Rayfield	Selkirk M	×
Raymond	Muskoka & P. S'd O	×
Reaboro	Victoria, S. R. O	×
Reaburn	Lisgar M	×
Read	Westmoreland N. B	×
Read	Hastings, E. R. O	×
Reading	Wellington, C. R. O	×
Rear of Baddeck Bay	Victoria N. S	×
Rear of Ben Eoin	Cape Breton N. S	×
Rear of Black River	Richmond N. S	×
Rear Little Judique	Inverness N. S	×
Rear L. Sporling Mt	Richmond N. S	×
Rear Ball's Creek	Cape Breton N. S	×
Reay	Simcoe, E. R. O	×
Rebecca	Middlesex, E. R. O	×
Red Bank	Northumberland N. B	175
Red Bay	Bruce, N. R. O	×
Red Deer	Alta	×
Red Head	St. John N. B	×
Red House	King's P. E. I	×
Redickville	Grey, E. R. O	×
Red Islands	Richmond N. S	×
Red Mountain	Compton Q	×
Redmersville	Prince Edward O	200
Redpath	Assa	×
Red Point	Kings P. E. I	×
Red Rapids	Victoria N. B	×
Red Rock	Algoma O	×
Red Wing	Grey, E. R. O	×
Red Wood	Simcoe, E. R. O	×
Reedham	Megantic Q	×
Reedsdale	Megantic Q	×
* *Regina*	Assa	700
Reid's Mills	Dundas O	×
Reinland	Marquette M	×
Relessey	Cardwell O	×
Renaud's Mills	Kent N. B	×
Renforth	Brant, N. R. O	×
* *Renfrew*	Renfrew, S. R. O	1,610
Renfrew	Hants N. S	×
Renous Bridge	Northumberland N. B	×
Renton	Norfolk, N. R. O	×
Renton Station	Wentworth, S. R. O	100
Repentigny	L'Assomption Q	×
Restoule	Muskoka & P. S'd O	×
Revelstoke	Yale & Kootenay B. C	300
Reynardson	Yarmouth N. S	×
Reynolds	Northumberland N. B	×
Rhodes	King's N. S	×
Rhode's Corner	Lunenburg N. S	×
Riceburg	Missisquoi Q	250
Richard's Landing	Algoma O	×
* *Riceville*	Prescott O	100
Richardville	Megantic Q	×
Richardville	Kent N. B	×
Richibucto	Kent N. B	800
Richibucto Village	Kent N. B	×
Richland	Lisgar M	×
Richmond Corner	Carleton N. B	275
* *Richmond*	Richmond Q	2,300
* *Richmond*	Carleton O	460
* *Richmond Hill*	York, W. R. O	1,000
Richmond Station	Richmond Q	×
Richmond	Marquette M	×
Richview	Peel, N. R. O	×
Richwood	Brant, N. R. O	100
Ridgeton	Pontiac Q	×
* *Ridgetown*	Elgin, W. R. O	2,700
Ridgeville	Monck O	109
Ridgeville	Provencher M	×
* *Ridgeway*	Welland O	800
Ridley	Kent O	×
Rigaud	Vaudreuil Q	600
Riley Brook	Victoria N. B	×
Rimington	Hastings, N. R. O	×
* *Rimouski*	Rimouski Q	1,400
Ringwood	Ontario, N. R. O	218
Ripley	Bruce, S. R. O	650
Ripon	Ottawa Q	180
Ritcey's Cove	Lunenburg N. S	200
Riverbank	Wellington, C. R. O	×
Riverbank	Carleton N. B	×
River Beaudette	Soulanges Q	×
River Bourgeoise	Richmond N. S	964
River Charlo	Restigouche N. B	275
Riverdale	Digby N. S	×
Riverdale	Queen's P. E. I	×
River David	Yamaska Q	500
River de Chute	Carleton N. B	100
River Dennis	Inverness N. S	300
River Dennis Road	Inverness N. S	×
River Desert	Ottawa Q	×
Riverfield	Chateauguay Q	×
River Gilbert	Beauce Q	×
R. Gilbert G. Mines	Beauce Q	×
River Hebert	Cumberland N. S	400
River Hebert, W. Side	Cumberland N. S	×
River Inhab. Bridge	Richmond N. S	×
River John	Pictou N. S	500
River John Road	Colchester N. S	×
River Joseph	Ottawa Q	×
River Louison	Restigouche N. B	160
River Philip	Cumberland N. S	×
Riversdale	Bruce, E. R. O	120
Riversdale	Colchester N. S	100
River Side	Albert N. B	250
Riverside	York, E. R. O	×
Riverside	N. Westminster B. C	×
Riverside	Inverness N. S	×
Riverstown	Wellington, N. R. O	100
Riverview	Grey, E. R. O	×
River View	Albert N. B	×
Riviere a Claude	Gaspe Q	250
Riviere a la Martre	Gaspe Q	×
Riviere a l'Ours	Chicoutimi Q	×
Riviere a Pierre	Portneuf Q	×
Riviere aux Pins	Quebec Q	×
Riviere Bois Clair	Lotbiniere Q	450
Riviere des Caches	Northumberland N. B	×
Riviere des Plantes	Beauce Q	×
Riviere des Prairies	Hochelaga Q	150
* *Riv. du Loup (en bas)*	Temiscouata Q	4,000
Riv. du Loup Stat'n	Temiscouata Q	×
Riviere Gagnon	Terrebonne Q	×
Riviere la Fleur	Montmorenci Q	×
Riviere la Madeleine	Gaspe Q	×
Riviere Noire	Arthabaska Q	×
Riviere Ouelle	Kamouraska Q	×
Reviere St. Jean	Saguenay Q	×
Riv. Ste. Marguerite	Saguenay Q	×
Riv. Trois Pistoles	Temiscouata Q	300
Rivington	Argenteuil Q	×
Rivulet	Inverness N. S	×
Roach's Point	York, N. R. O	×
Roach Vale	Guysboro N. S	×
Robertson's Point	Queen's N. B	×
Robertson Station	Megantic Q	×
Roberval	Chicoutimi Q	×
Robichaud	Westmoreland N. B	×
Robillard	Russell O	×
Robinson	Compton Q	210
Robinsonville	Restigouche N. B	×
Robitaille	Bonaventure Q	×
Robins	Richmond N. S	×
Roblin	Lennox O	200
Rob Roy	Grey, E. R. O	×
Rocanville	Assa	×
Rochelle	Shefford Q	150
Rochesterville	Carleton O	×
Rock Barra	King's P. E. I	×
Rockburn	Huntingdon Q	100
Rockdale	Richmond N. S	×
Rockfield	Leeds, S. R. O	×
Rockford	Norfolk, N. R. O	150
Rock Forest	Sherbrooke Q	×
* *Rockingham*	Renfrew, S. R. O	×
Rockingham	Yarmouth N. S	150
Rockingham Station	Halifax N. S	×
Rock Island	Stanstead Q	400
Rockland	Russell O	×
Rockland	Westmoreland N. B	100
Rockland Station	Westmoreland N. B	×
Rockliffe	Renfrew, N. R. O	×
Rocklin	Pictou N. S	200
Rockly	Cumberland N. S	×
Rocklyn	Grey, E. R. O	100
Rockport	Leeds, S. R. O	300
Rockport	Westmoreland N. B	×
Rockside	Cardwell O	×
Rock Springs	Brockville O	×
Rockton	Wentworth, N. R. O	800
Rockville	King's N. B	×
Rockville	Yarmouth N. S	×
Rockwell Settlement	Cumberland N. S	×
Rockway Valley	Ottawa Q	×
Rockwood	Wellington, S. R. O	700
Rocky Bay	Richmond N. S	×
Rocky Mountain	Pictou N. S	×
Rocky Point	Queen's P. E. I	×
Rocky Saugeen	Grey, S. R. O	×
Rogerville	Perth, S. R. O	×
Rogersville	Northumberland N. B	100
Rodney	Elgin, W. R. O	600
Roebuck	Grenville, S. R. O	×
Roger's Hill	Pictou N. S	300
Rollo Bay	King's P. E. I	×
Rollo Bay Cross	King's P. E. I	×
Rolling Dam	Charlotte N. B	500
Roman's Valley	Guysboro' N. S	×
Romily	Cardwell O	×
Romney	Kent O	×
Roma	Queen's P. E. I	×
Rondeau	Kent O	×
Ronson	Norfolk, N. R. O	×
Rose	Cumberland N. S	×
Roseberry	Selkirk M	×
Rosedale	Victoria, N. R. O	200
Rosedale	Carleton N. B	×
Rosedene	Monck O	150
Rosehall	Prince Edward O	200
Roseland	Selkirk M	×
* *Rosemont*	Simcoe, S. R. O	250
Roseneath	Northumberl'd, W. R. O	250
Rose Plain	Assa	×
Rosetta	Lanark, N. R. O	×
Rose Vale	Albert N. B	×
Rose Valley	Queen's P. E. I	×
Roseville	Waterloo, S. R. O	300
Roseway	Shelburne N. S	×
Roslin	Hastings, E. R. O	×
Roslin	Cumberland N. S	×
Ross	Renfrew, N. R. O	×
Rossburn	Marquette M	×
Ross' Corner	King's N. S	×
* *Rosseau*	Muskoka & P. S'd O	×
Rosseau Falls	Muskoka & P. S'd O	×
Rosser	Lisgar M	×
Ross Mills	Levis Q	×
Rossmore	Prince Edward O	100
Ross Mount	Durham, E. R. O	×
Rossway	Digby N. S	100
Rostock	Perth, N. R. O	×
Rothes	Ontario, W. R. O	×
Rothsay	Wellington, C. R. O	260
Rothsay	King's N. B	300
Rouge Hill	Ontario, W. R. O	×
Rougemont	Rouville Q	600
Round Hill	King's N. B	×
Round Hill	Annapolis N. S	200
Round Island	Cape Breton N. S	×
Round Lake	Peterboro', E. R. O	×
Round Plains	Norfolk, N. R. O	100
Rounthwaite	Selkirk M	×
Routhier	Prescott O	×
Rowan Mills	Norfolk, S. R. O	×
Rowanton	Pontiac Q	×
Rowena	Dundas O	200
Rowena	Victoria N. B	×
Rowland	Selkirk M	×
Roxbury	Annapolis N. S	×
Roxburgh	Albert N. B	×
Roxham	St. Johns Q	150
Roxton Falls	Shefford Q	1,000
Roxton Pond	Shefford Q	600
Royal	Provencher M	×
Royal Road	York N. B	×
Royal Road, West	York N. B	×
Royalton	Carleton N. B	×
Rugby	Simcoe, E. R. O	200
Ruisseau a Sem	Rimouski Q	×
Runnymede	Bonaventure Q	200
Rupert	Ottawa Q	×
Rusagonis	Sunbury N. B	×
Rusagonis Station	Sunbury N. B	×
Ruscom River	Essex, N. R. O	100
Ruscom Station	Essex, N. R. O	×
Rush Point	Peterboro', E. R. O	×
Ruskview	Simcoe, S. R. O	×
Russeldale	Perth, S. R. O	×
Russell	Russell O	300
Russelton	Simcoe, N. R. O	×
Russeltown	Chateauguay Q	150
Rustico	Queen's P. E. I	250
Rusticoville	Queen's P. E. I	×
Ruther Glen	Carleton N. B	×
Ruther Glen	Renfrew, N. R. O	×
Rutherford	Bothwell O	×
Ruthven	Essex, S. R. O	150
Ruttanville	Selkirk M	×
Ryckman's Corners	Wentworth, S. R. O	×
Rydal Bank	Algoma O	×
Rye	Muskoka & P. S'd O	×
Rylstone	Northumberland, E. R. O	×
Ste. Adele	Terrebonne Q	100
Ste. Adelaide d. Pabos	Gaspe Q	×
St. Adolphe de How.	Argenteuil Q	×
St. Adrien	Wolfe Q	×
St. Agapit	Lotbiniere Q	×
St. Agatha	Waterloo, S. R. O	105
Ste. Agathe	Provencher M	×
Ste. Agathe de Lotb.	Lotbiniere Q	×
St. Agathe des Monts	Terrebonne Q	×
Ste. Agnes de Charl'x	Charlevoix Q	400
St. Agnes de Dundee	Huntingdon Q	×
St. Aime	Richelieu Q	450
St. Alban	Portneuf Q	500
St. Albert	Russell Q	×
St. Albert	Arthabaska Q	450
St. Albert	Alta	×
St. Alexander Stat.	Iberville Q	×
St. Alex. d'Iberville	Iberville Q	700
St. Alex. de Kam'rska	Kamouraska Q	400
St. Alexis de Monte	Montcalm Q	200
St. Alexis des Monts	Maskinonge Q	×
St. Alphonse	Joliette Q	400
St. Alphonse	Selkirk M	×
St. Alphonse de Gran.	Shefford Q	×
St. Amedee	Ottawa Q	×
St. Amour	Prescott O	×
St. Anaclet	Rimouski Q	250
St. Andre Avelin	Ottawa Q	×
St. Andre de Kam.	Kamouraska Q	300
St. Andre de Shediac	Westmoreland N. B	×
St. Andrews	Charlotte N. B	1,800
St. Andrews	Antigonishe N. S	400
* *St. Andrews, East*	Argenteuil Q	900
St. Andrews, West	Cornwall O	200
St. Andrews	Lisgar M	×
St. Andrews	King's P. E. I	×
St. Angele de Monn'r	Rouville Q	200
Ste. Angele de Laval	Nicolet Q	200
St. Anicet	Huntingdon Q	200
St. Anne	Kent N. B	100
St. Anne de Bellevue	Jacques-Cartier Q	400
St. Anne de Beaupre	Montmorency Q	600
Ste. Anne de la Per.	Champlain Q	1,000
Ste. Anne des Monts	Gaspe Q	×
Ste. Anne des Plaines	Terrebonne Q	×
Ste. Anne la Pocatiere	Kamouraska Q	500
Ste. Anne de Presc.	Prescott O	×
St. A. de Restigouche	Bonaventure Q	×
Ste. Anne de Sorel	Richelieu Q	×
St. Ann's	Victoria N. S	×
St. Ann's	Provencher M	×
St. Ann's	Queen's P. E. I	×
St. Ann's	Monck O	×
St. Anselme	Dorchester Q	600
St. Anthony	Kent N. B	×
St. Antoine, Lotbi're	Lotbiniere Q	×
St. Antoine, Riv. Ric.	Vercheres Q	×
St. Antonin	Temiscouata Q	300
St. Apollinaire	Lotbiniere Q	400
St. Armand Centre	Missisquoi Q	120
St. Armand Station	Missisquoi Q	350
St. Arsene	Temiscouata Q	400
St. Athanase	Iberville Q	1,850
St. Aubert	L'Islet Q	×
St. Augustine	Huron, W. R. O	×
St. Augustin, P'tneuf	Portneuf Q	400
St. Augustin, Two M.	Two Mountains Q	200
Ste. Barbe	Huntingdon Q	×
St. Barnabe, R. Yam.	St. Hyacinthe Q	×
St. Barnabe, St. Mau.	St. Maurice Q	200
* *St. Barthelemi*	Berthier Q	600
St. Bazile de Portn'f	Portneuf Q	300
St. Bazile le Grand	Chambly Q	120
St. Bazile Station	Portneuf Q	×
Ste. Beatrix	Joliette Q	100
St. Benoit	Two Mountains Q	500
St. Bernard de Dorc'r	Dorchester Q	400
St. Bernard, South	St. John's Q	×
St. Bernard	Digby N. S	×
St. Blandine	Rimouski Q	×
St. Bonaventure	Drummond Q	×
St. Boniface	Provencher M	800
Ste. Brigide	Iberville Q	400
Ste. Brigitte des S'lts	Nicolet Q	550
St. Bruno	Chambly Q	300



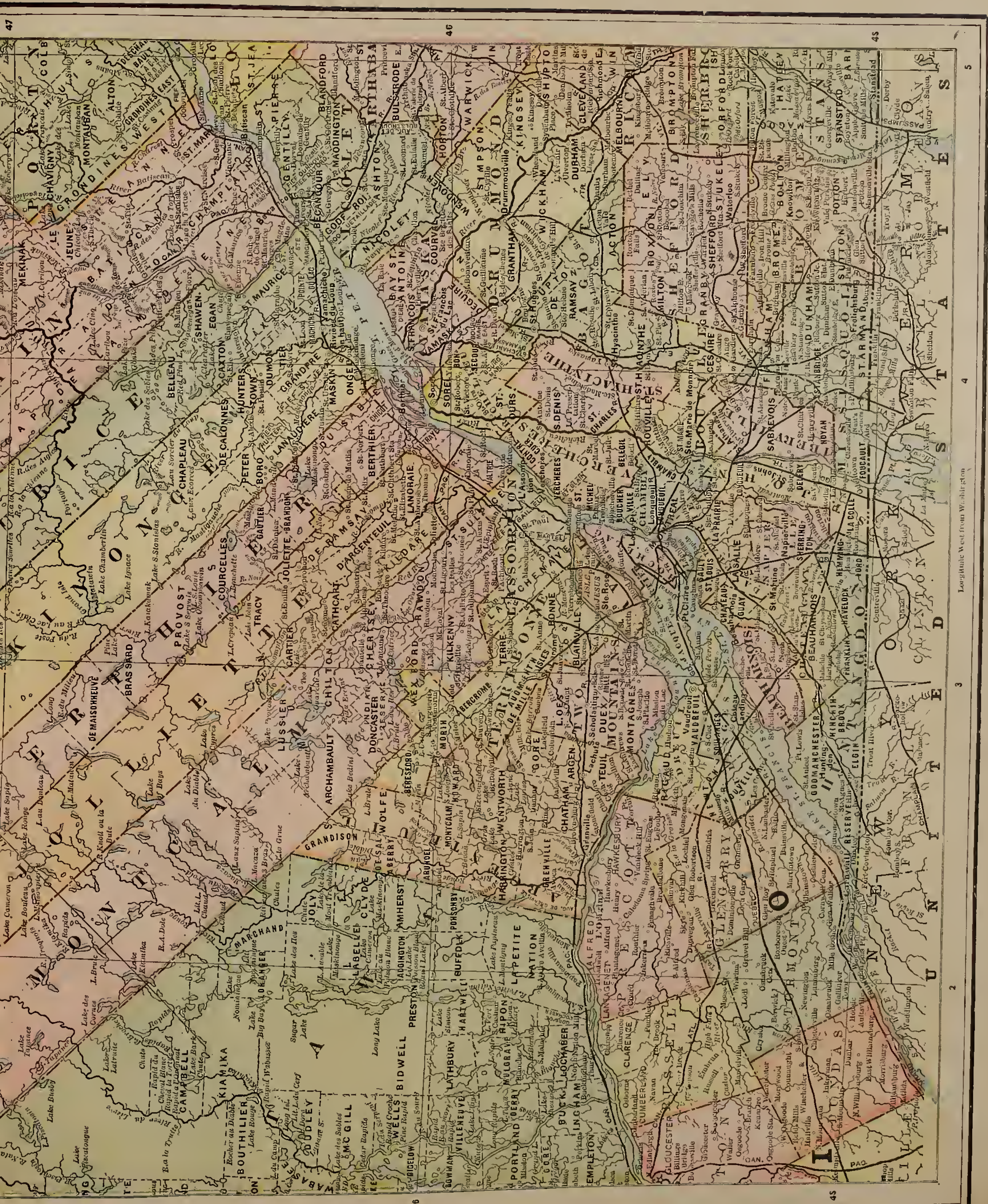
WEST CENTRAL PART
OF
QUEBEC

Geo. F. Cram, Engraver,

Chicago, Ill.

SCALE OF MILES.

0 2 4 6 8 10 15 20 30 40
Longitude West from Greenwich
75
74
73
72
49
48
47
CHAMPLAIN
ST. MAURICE
MASKINONGE
JOLIETTE
CHICOUTIMI
LAKE ST. JOHN
LINE OF EXPLORATION
ALBANEL
NORMANDIN
DUFFERIN
PARENT
DEMEULES
ASHUAPMOUCHOUAN
OUIATCHOUAN
ROBERVAL
CHARLEVOIX
METABETCHOUAN
DEQUEN
DABLON
VALLIERES
MALHIOT
TURCOTTE
CARIGNAN
POLETTE
BOUCHIER
MEKINAK
LE JEUNE
CHAVIGNY
OSSOSANE
LA SALLE
Lake Normandin
Clear Water Lake
Lake des battures de sable
Lake Ashuanan
Lake Shangois
R. Micatmisk
R. Mistamisk
Falls of Grand Mere
Chapelle
Kikendatch
Travers
Sources of the R. S. Maurice
Sources of the River Gatineau
Lake Oskik
Portage du Cypres
R. du Petit Rocher
R. Pokitawaganne
R. Mikiwanne
R. a la Truite
R. Jolie
Manitouashives Rapid
R. Najan
Rapid Kasipita
Wawetick
Mission Weymontachingue
R. au Ruban
R. Manouan
Lake Sochawatesto
Rpd. Weymontachingue
G. Batture
R. Flamand
Grand detour
Lake Kabashguatama
Lake Manjoagoos
Long Lake
Lake Eshwaham
Lake Capemechigama
Island
North West Branch
North East Branch
Gatineau River
Mejomangoos River
Lake Dore
Lake la Culotte
Lake Wabaskoubyink
Portage
Lake du Repos
Lake Moriatice
Old Man's Creek
Serpent Fall
Rapide Fort de l'Ile
Chute a l'esturgeon
Lake Tapanee
Lake Busby
Lake Cameron
Lake Bouleau
Lake Sapin
Lake Rouge
L. au Bouleau
R. Iroquois
Lake Kawashkamick
Lake Bondonack
Conamableacossa
R. Pabelognang
Lake Pabelognang
Lake Broster
Lake Clain
R. du Poste
Lake des Iles
L. Ouquakamaksis
Lake Najaoualank
Grand Island
R. Pequaquasoui
Lake de la Croix
Lake Edward
Lake Edward Island
Grand Lake Wayagamack
Lit. L. Wayagamack
Lake aux Brochets
Rapid a Martin
R. Bostonnais
Lake Bouteille
Long Rapid
Crook'd L.
L. Quinn
R. Pierriche
G. R. Pierriche
Trenche
R. Chicoubiche
Chamouchouan
R. Nouchippu
River Mistassini
R. du Sommet
St. Prime
P. Bleus
Isl. aux Couleuvres
Isl. la Traverse
S. Louis
Chambord
Commissioners Lake
Lake Ouaquagamack
St. Decouverte
L. Ouiatchouan
L. Bouchette
Lake Kiskissink
R. Vermillon
Lake Wapizagonke
L. Mekinak
Lake Long
Lake Bouchard
James
Rapid
Rapids
Chute
River
Lake

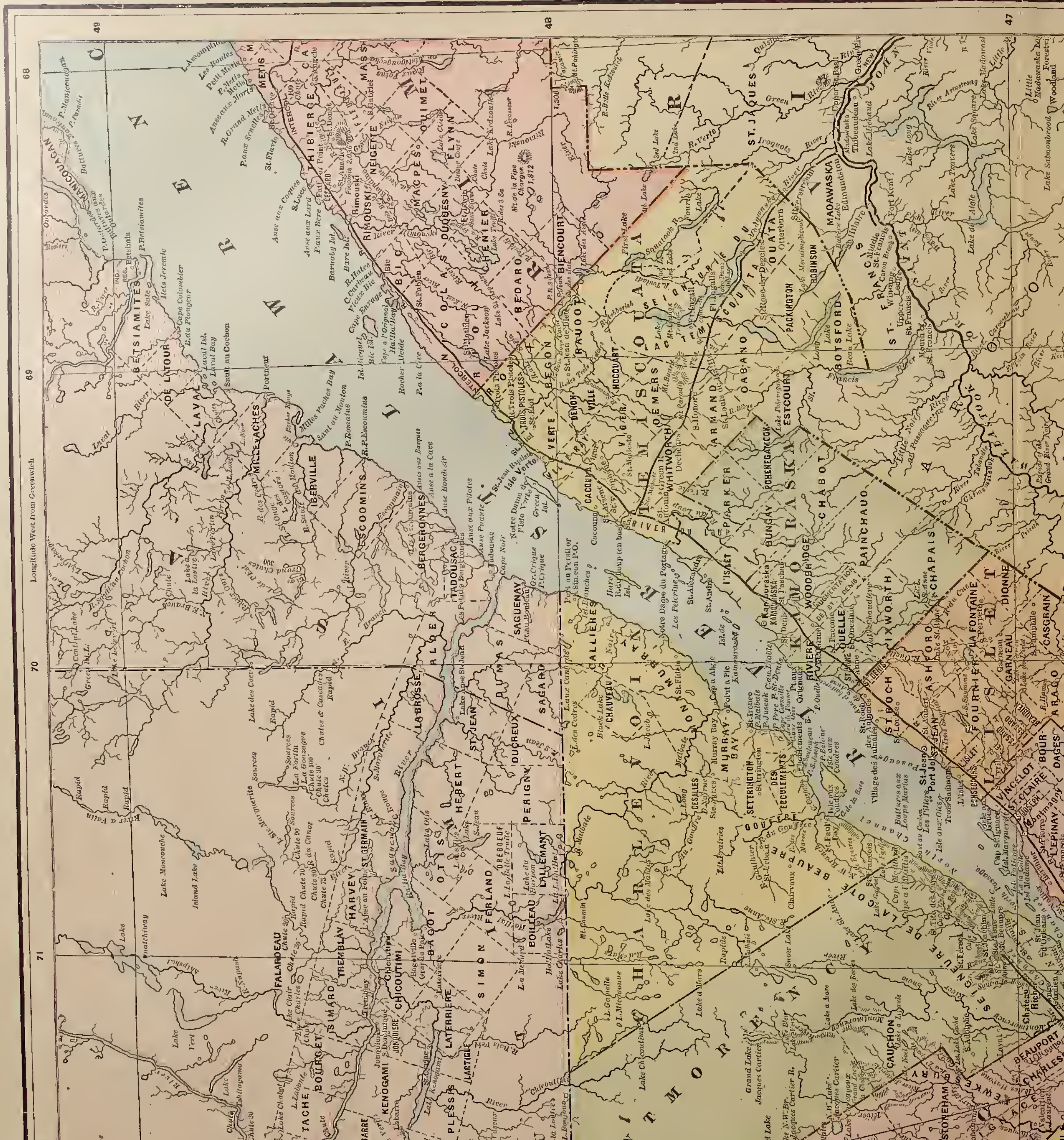

47
46
45
2
3
4
5
Longitude West from Washington
MONTCALM
JOLIETTE
BERTHIER
ST. MAURICE
CHAMPLAIN
MASKINONGE
L'ASSOMPTION
TERREBONNE
ARGENTEUIL
TWO MOUNTAINS
VAUDREUIL
SOULANGES
BEAUHARNOIS
HUNTINGDON
CHATEAUGUAY
LAPRAIRIE
NAPIERVILLE
ST. JOHNS
IBERVILLE
MISSISQUOI
BROME
SHEFFORD
ROUVILLE
ST. HYACINTHE
BAGOT
DRUMMOND
ARTHABASKA
NICOLET
YAMASKA
RICHELIEU
VERCHERES
CHAMBLY
STANSTEAD
SHERBROOKE
RICHMOND
GLENGARRY
STORMONT
DUNDAS
PRESCOTT
RUSSELL
OTTAWA
PONTIAC
MONTREAL
SOREL
QUEBEC
UNITED STATES
NEW YORK
VERMONT
CLINTON
FRANKLIN

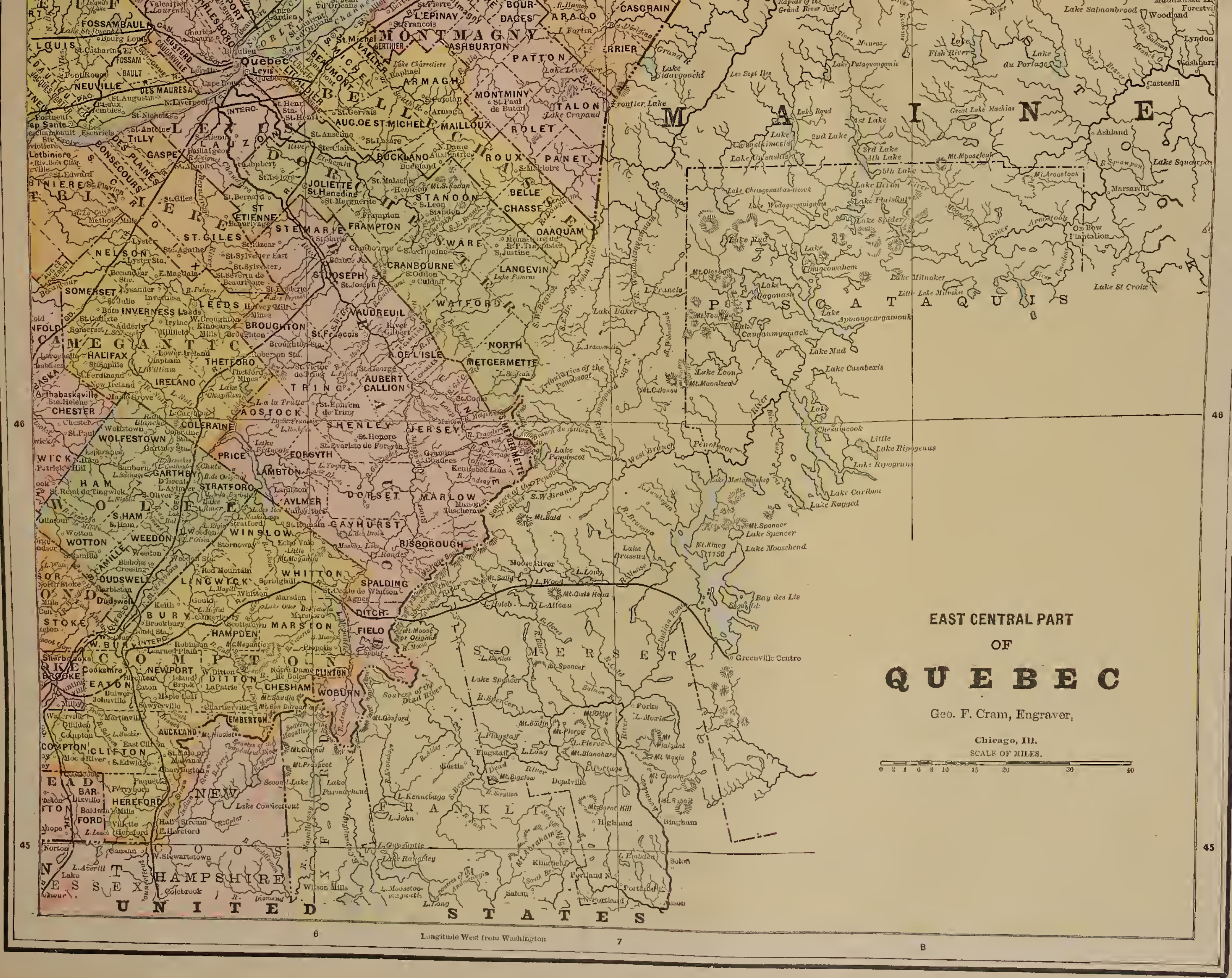
LIST OF POST OFFICES IN CANADA.

POST OFFICE.	ELECTORAL DISTRICT.	POP.
St. Bruno de Kam	Kamouraska Q	×
St. Bruno Station	Chambly Q	×
St. Calixte, Kilkenny	Montcalm Q	400
St. Camille	Wolfe Q	900
St. Canute	Two Mountains Q	300
* *St. Casimir*	Portneuf Q	700
St. Cassien des Caps	Charlevoix Q	×
St. Castin	Kent N. B	×
Ste. Catherine	Portneuf Q	400
Ste. Catherines River	Queen's N. S	×
* *St. Catharines*	Lincoln O	9,170
Ste. Cee de Levrard	Nicolet Q	500
St. Cecile de Whitton	Compton Q	×
St. Celestin	Nicolet Q	350
* *St. Cesaire*	Rouville Q	500
St. Charles	Lisgar M	×
St. Charles de Caplan	Bonaventure Q	×
St. Chas., Riv. Boyer	Bellechasse Q	×
St. Chas., Riv. Rich'u	St. Hyacinthe Q	×
St. Chrysostome	Chateauguay Q	1,000
St. Clair Siding	Essex O	×
Ste. Claire	Dorchester Q	2,000
St. Clements	Waterloo, N. R. O	200
St. Clement	Temiscouata Q	×
St. Clet	Soulanges Q	250
Ste. Clothilde	Arthabaska Q	×
Ste. Clothilde de Chat	Chateauguay Q	×
St. Columbia	Two Mountains Q	300
St. Come	Joliette Q	150
St. Constant	Laprairie Q	300
St. Croix	Hants N. S	120
St. Croix	York N. B	300
St. Croix	Lotbiniere Q	700
St. Cunegonde	Hochelaga Q	9,293
St. Cuthbert	Berthier Q	700
St. Cuthbert Station	Berthier Q	×
St. Cyprien	Temiscouata Q	×
St. Cyr	Richmond Q	×
St. Cyriac	Chicoutimi Q	×
St. Cyrille de L'Islet	L'Islet Q	×
St. Cyrille de Wend	Drummond Q	×
St Damase	St. Hyacinthe Q	400
St. Damase de Rim	Rimouski Q	×
St. Damie de Brandon	Berthier Q	×
S. Damien de Cuckl'd	Bellechasse Q	×
St. David de Levis	Levis Q	×
St. David's	Lin. & Niagara O	300
St. Denisdela Bout're	Kamouraska Q	×
St. Denis, Riv. Rich	St. Hyacinthe Q	×
St. Didace	Maskinonge Q	300
St. Dom de Bagot	Bagot Q	×
St. Dominique Stat	Soulanges Q	×
St. Dom. des Cedres	Soulanges Q	270
St. Donat	Rimouski Q	800
St. Donat de Mont	Montcalm Q	×
St. Dorothee	Laval Q	300
St. Edouard de Nap	Napierville Q	300
St. Ed. de Frampton	Dorchester Q	×
St. Edwidge	Compton Q	×
St. Eleanors	Prince P. E. I	400
St. Eleuthere	Kamouraska Q	×
St. Elie	St. Maurice Q	300
Ste. Elizabeth	Joliette Q	490
St. Elmo	Glengarry O	156
St. Eloi	Temiscouata Q	350
St. Elzear	Beauce Q	300
Ste. E. de l'Energie	Joliette Q	200
St. Ephrem de Tring	Beauce Q	×
St. Ephrem d'Upton	Bagot Q	400
St. Esprit	Montcalm Q	1,500
St. Esprit	Richmond N. S	×
St. E. de Beauharnois	Beauharnois Q	×
St. Etienne de Bolt'n	Brome Q	×
St. Etienne des Gres	St. Maurice Q	×
St. Et. du Saguenay	Saguenay Q	×
St. Eugene	Prescott O	500
St. Eug. de Grantham	Drummond Q	×
St. Eulalie	Nicolet Q	×
St. Eustache	Two Mountains Q	900
St. Evar. de Forsythe	Beauce Q	400
St. Fabien	Rimouski Q	250
St. Faustin	Terrebonne Q	300
Ste. Famille	Montmorency Q	300
St. Felicien	Chicoutimi Q	300
St. Felicite	Rimouski Q	×
St. Felix de Valois	Joliette Q	700
St. Ferdinand	Megantic Q	×
St. Fereol	Montmorency Q	200
St. Fidele	Charlevoix Q	200
Ste. Flavie	Rimouski Q	700
Ste. Flavie Station	Rimouski Q	×
St. Flavien	Lotbiniere Q	100
Ste. Flore	Champlain Q	200
St Fortunat	Wolfe Q	300
St. Foy	Quebec Q	300
St. Francois, Beauce	Beauce Q	600
St. Francois de Sales	Laval Q	150
St. Fran. d'Orleans	Montmorency Q	300
St. Francois du Lac	Yamaska Q	800
Ste. Francoise	Temiscouata Q	×
St. Francois, N. East	Beauce Q	×
St. Francois, Mont'ny	Montmagny Q	350
St. Francois Xavier	Lisgar M	1,000
St. Fran. X de Viger	Temiscouata Q	×
St. Fr. X. de Brompt'n	Richmond Q	×
St. Frederic	Beauce Q	700
St. Gab. de Brandon	Berthier Q	600
St. Gab. de Montreal	Hochelaga Q	×
St. Gabriel Station	Portneuf Q	×
St. Gedeon	Chicoutimi Q	×
Ste. Genevieve	Jacques Cartier Q	750
Ste. Gen. de Batiscan	Champlain Q	×
* *St. George*	Charlotte N. B	600
St. George, Beauce	Beauce Q	×
* *St. George, Brant*	Brant, N. R. O	625
St. Geo. de Windsor	Richmond Q	300
St. George Est	Beauce Q	150
St. George's Channel	Richmond N. S	×
St. G. de Montarville	Ottawa Q	×
St. G. de Grantham	Drummond Q	×
St. G. de Kamouraska	Kamouraska Q	×
Ste. Gertrude	Nicolet Q	200
St. Gervais	Bellechasse Q	500
St. Giles	Lotbiniere Q	200
St. Gregoire	Nicolet Q	400
St Guill'me d'Upton	Drummond Q	600
Ste. Helene de Kam	Kamouraska Q	350
Ste. Helene de Bagot	Bagot Q	250
Ste. Hel. de Chester	Arthabaska Q	×
St. Helen's	Huron, W. R. O	150
Ste. Henedine	Dorchester Q	1,100
St. Henri de Levis	Levis Q	×
St. Henri de Mont'l	Hochelaga Q	13,415
St. Henri Station	Levis Q	×
St. Hermas	Two Mountains Q	250
St. Hermenegilde	Stanstead Q	200
St. Hilaire	Victoria N. B	×
St. Hilaire Station	Rouville Q	×
St. Hilaire Village	Rouville Q	1,300
St. Hipp. de Kilkenny	Terrebonne Q	100
St. Honore	Beauce Q	×
St. Hubert	Chambly Q	300
St. Hugues	Bagot Q	300
* *St. Hyacinthe*	St. Hyacinthe Q	7,016
St. Ignace	Kent N. B	×
St. Irenee	Charlevoix Q	350
St. Isidore, Dorchester	Dorchester Q	400
St. Isidore, Laprairie	Laprairie Q	300
St. Isidore	Gloucester N. B	×
St. Isidore Junction	Laprairie Q	×
St. Isidore de Presc't	Prescott O	×
St. Ives	Middlesex, E. R. O	×
* *St. Jacob's*	Waterloo, N. R. O	500
St. Jacques	Montcalm Q	500
St. Jacques le Mineur	Laprairie Q	300
St. James	Lisgar M	800
St. James Park	Middlesex, S. R. O	×
St. Janvier	Terrebonne Q	×
St. Jean Baptiste	Provencher M	600
St. J. Bp. de Montreal	Hochelaga Q	×
St J. Bp. de Rouville	Rouville Q	350
St. Jean Chry. Levis	Levis Q	×
St. Jean de Dieu	Temiscouata Q	×
St. J. des Chaillons	Lotbiniere Q	400
St. Jean de Matha	Joliette Q	300
St. Jean d'Orleans	Montmorency Q	300
St. Jean l'Evangeliste	Bonaventure Q	×
St. Jean Port Joli	L'Islet Q	500
* *St. Jerome*	Terrebonne Q	3,000
St. Joachim de Mont	Montmorency Q	×
St. Joach. de Shefford	Shefford Q	×
St. Joach. Riv. Ruse'm	Essex O	×
St. John	St. John N. B	39,179
St. John Suburb	Quebec Q	×
* *St. John's, East*	St. John's Q	4,300
St. John's, West	Welland O	×
St. Joseph d'Alma	Chicoutimi Q	600
St. Joseph de Beauce	Beauce Q	×
St. Joseph de Lepage	Rimouski Q	×
St. Joseph	Westmoreland N. B	×
St. Joseph	Antigonishe N. S	×
St. Joseph de Levis	Levis Q	×
St. Joseph de Sorel	Richelieu Q	×
St. Joseph du Lac	Two Mountains Q	250
St. Jovite	Terrebonne Q	200
St. Jude	St. Hyacinthe Q	400
Ste. Julie de Verch	Vercheres Q	1,200
Ste. Julie de Somer't	Megantic Q	400
Ste. Julienne	Montcalm Q	180
St. Justin	Maskinonge Q	350
St. Just. de Newton	Vaudreuil Q	230
St. Lambert de Levis	Levis Q	×
St. Lambert, Mont	Chambly Q	×
St. Laure't d'Orleans	Montmorency Q	450
St. Laurent, Mont'l	Jacques Cartier Q	×
St. Laurent	Lisgar M	×
St. Lawrence	Frontenac O	×
St. Lazare de Belle'e	Bellechase Q	400
St. Lazare de Vaudr'l	Vaudreuil Q	300
St. Leon	Maskinonge Q	300
St. Leon	Selkirk M	×
St. Leonard d'Aston	Nicolet Q	×
St. Leonard Station	Victoria N. B	×
St. Leonard's	Victoria N. B	1,000
St. Liboire	Bagot Q	240
St. Liguori	Montcalm Q	×
St. Louis de Bonsec'rs	Richelieu Q	×
St. Louis de Gonzague	Beauharnois Q	700
St. Louis de Kent	Kent N. B	×
St. Louis de Ha Ha	Temiscouata B	×
Ste. Louise	L'Islet Q	×
St. Luc	St. John's Q	180
Ste. Luce	Rimouski Q	1,200
Ste. Luce Station	Rimouski Q	×
Ste. L. de Doncaster	Terrebonne Q	×
Ste. Madeleine	St. Hyacynthe Q	520
St. Magloire	Bellechasse Q	×
St. Malachie	Dorchester Q	400
St. Malo	Compton Q	300
St. Marc	Vercheres Q	500
St. Marcel	Richelieu Q	1,000
St. Margaret's	King's P. E. I	×
Ste. Marguerite	Dorchester Q	500
Ste. M. de Monnoir	Rouville Q	1,350
Ste. Marthe	Vaudreuil Q	400
St. Martin	Laval Q	800
Ste. Martine	Chateauguay Q	400
St. Martin's	St. John N. B	2,000
* *St. Mary's*	Perth, S. R. O	4,000
St. Mary's	Kent N. B	200
St. Mary's Ferry	York N. B	150
Ste. Mary's River	Guysborough N. S	×
St. Mary's Road	King's P. E. I	×
St. Mathias	Rouville Q	300
St. Mathieu	Rimouski Q	300
St. Maurice	Champlain Q	200
St. Maurice Forges	St. Maurice Q	×
Ste. Melanie	Joliette Q	100
St. Michel de Bellech	Bellechasse Q	×
St. Michel de Nprvl'e	Napierville Q	×
St. Michel des Saints	Berthier Q	850
St. Michel de Went'h	Argenteuil Q	×
St. Modeste	Temiscouata Q	200
St. Moise	Rimouski Q	100
St. Mon. deux Mont	Two Mountains Q	×
Ste. Mon. de Nicolet	Nicolet Q	×
St. Narcisse	Champlain Q	400
St. Neree	Bellechasse Q	×
St. Nicholas	Levis Q	400
St. Norbert	Berthier Q	375
St. Norbert	Provencher M	×
St. Octave	Rimouski Q	200
St. Odilon	Dorchester Q	×
St. Ola	Hastings, N. R. O	×
St. Onezime	Kamouraska Q	200
St. Onge	Russell O	×
St. Ours	Richelieu Q	800
St. Pacome	Kamouraska Q	500
St. Pamphile	L'Islet Q	×
St. Paschal	Kamouraska Q	700
St. Patrick	Simcoe, E. R. O	×
St. Patrick	Temiscouata Q	×
St. Patrick's Channel	Victoria N. S	×
St. Patrick's Hill	Arthabaska Q	250
St. Paul de la Croix	Temiscouata Q	×
St. Paul d'Industrie	Joliette Q	×
St. Paul du Buton	Montmagny Q	200
St. Paul l'Hermite	L'Assomption Q	200
St. Paul's	Kent N. B	600
St. Paulin	Maskinonge Q	×
St. Paul's	Pictou N. S	×
St. Paul's Bay	Charlevoix Q	8,700
St. Paul's Station	Perth, S. R. O	×
St. Perpetue	Nicolet Q	460
St. Peter's	Richmond N. S	250
St. Philippe de Lap	Laprairie Q	200
St. Phil. d'Argenteuil	Argenteuil Q	150
St. Philippe de Nery	Kamouraska Q	×
Ste. Philomene	Chateauguay Q	250
Ste. P. d'Echaillons	Lotbiniere Q	×
St. Pie	Bagot Q	800
St. Pie	Provencher M	×
St. Pie de Guire	Yamaska Q	×
St. Pierre Baptiste	Megantic Q	×
St. Pierre d'Orleans	Montmorency Q	×
St. Pierre les Becquets	Nicolet Q	×
St. Pierre, Montma'y	Montmagny Q	×
St. Placide	Two Mountains Q	×
St. Polycarpe	Soulanges Q	500
St. Prime	Chicoutimi Q	×
St. Prosper	Champlain Q	×
St. Prosper de Dor	Dorchester Q	×
St. Raphael, East	Bellechasse Q	400
St. Raphael, West	Glengarry O	100
* *St. Raymond*	Portneuf Q	1,600
St. Redempteur	Vaudreuil Q	×
St. Regis	Huntingdon Q	×
St. Remi	Napierville Q	900
St. Remi de Tingw'k	Arthabaska Q	×
St. Remi d'Amherst	Ottawa Q	×
St. Robert	Richelieu Q	550
* *St. Roch de Quebec*	Quebec City, E. Q	×
St. Roch de Richelieu	Richelieu Q	500
St. Roch des Aulnaies	L'Islet Q	1,500
St. Roch l'Achigan	L'Assomption Q	400
St. Romain	Compton Q	600
Ste. Rosalie	Bagot Q	×
Ste. Rose	Laval Q	900
St. Rose de Watford	Dorchester Q	×
Ste. Rose du Degele	Temiscouata Q	600
St. Sam. de Guyhurst	Beauce Q	×
St. Sauveur des Mon	Terrebonne Q	300
St. Sauveur de Quebec	Quebec City, E. Q	×
Ste. Scholastique	Two Mountains Q	1,500
St. Sebastien	Iberville Q	300
St. Severe	St. Maurice Q	100
St. S. de Beaurivage	Lotbiniere Q	×
St. Simeon	Charlevoix Q	×
St. Sim. de Rimouski	Rimouski Q	×
St. Simon de Yamas'a	Bagot Q	×
St. Sophie de Megan	Megantic Q	×
St. Sophie de Lacorne	Terrebonne Q	×
St. Sophie de Levrard	Nicolet Q	×
St. Stanislas de Ch'n	Champlain Q	×
St. Stanis. de Kostka	Beauharnois Q	200
* *St. Stephen*	Charlotte N. B	7,000
St. Sulpice	L'Assomption Q	400
St. Sylvester, East	Lotbiniere Q	150
St. Sylvester, West	Lotbiniere Q	×
Ste. Thecle	Champlain Q	100
St. Telesphore	Soulanges Q	×
St. Theodore d'Acton	Bagot Q	200
St. Theod. de Chertsey	Montcalm Q	×
Ste. Theodosie	Vercheres Q	200
St. Therese de Blain	Terrebonne Q	1,500
St. Thomas	Carleton N. B	×
St. Thomas de Joliette	Joliette Q	×
* *St. Thomas, West*	Elgin, E. R. O	10,370
St. Timothee	Beauharnois Q	200
St. Tite	Champlain Q	×
St. Tite des Caps	Montmorency Q	660
St. Ubalde	Portneuf Q	×
St. Urbain de Chat	Chateauguay Q	×
St. Urbain de Charl	Charlevoix Q	×
Ste. Ursule	Maskinonge Q	×
St. Valentin	St. John Q	×
St. Valere de Bul	Arthabaska Q	×
St. Valerien	Shefford Q	150
St. Vallier	Bellechasse Q	×
St. Vallier Station	Bellechasse Q	×
Ste. Victoire	Richelieu Q	200
St. Victor de Tring	Beauce Q	×
St. Vincent de Paul	Laval Q	×
St. Vital	Provencher M	200
St. Wenceslas	Nicolet Q	180
St. Williams	Norfolk, S. R. O	200
St. Zacharie	Beauce Q	×
St. Zenon	Berthier Q	×
St. Zephirin	Yamaska Q	100
St. Zotique	Soulanges Q	400
Sable	Middlesex, N. R. O	×
Sable River	Shelburne N. S	200
Sabrevois	Iberville Q	200
Sackville	Westmoreland N. B	150
Sacre-Cœur de Marie	Megantic Q	×
Sadowa	Victoria, N. R. O	×
Sahanatien	Muskoka & P. S'd O	×
Sailor's Hope	King's P. E. I	×
Saintfield	Ontario, N. R. O	100
Saint Mary's River	Guysboro' N. S	×
Saint Norbert	Kent N. B	×
Saint Pierre	Kent N. B	×
Saints Anges	Beauce Q	×
Salem	Wellington, C. R. O	800
Salem	Albert N. B	×
Salem	Cumberland N. S	×
Salem	Yarmouth N. S	×
Salem Road	Cape Breton N. S	×
Salford	Norfolk, N. R. O	200
Salina	King's N. B	×
Salisbury	Westmoreland N. B	800
Salisbury	Marquette M	100
Salmon Beach	Gloucester N. B	150
Salmon Creek	Sunbury N. B	×
Salmondale	Queen's N. B	×
Salmonhurst	Victoria N. B	×
Salmon Point	Prince Edward O	×
Salmon River	St. John N. B	150
Salmon River	Cape Breton N. S	×
Salmon River	Guysboro N. S	200
Salmon River	Halifax N. S	100
Salmon River	Digby N. S	250
Salmon River (L. S.)	Guysboro' N. S	×
Salmonville	Peel O	100
Saltford	Huron, W. R. O	200
Salt Spring Island	Vancouver B. C	×
Salt Springs	King's N. B	150
Salt Springs	Pictou N. S	400
Salt Springs	Antigonishe N. S	×
Salt Springs Station	Cumberland N. S	×
Salterville	Selkirk M	×
Sambro	Halifax N. S	×
Sanborn	Wolfe Q	500
Sand Bay	Leeds, S. R. O	×
Sand Beach	Yarmouth N. S	×
Sandfield	Algoma O	×
Sandford	Ontario, N. R. O	150
Sandford	Yarmouth N. S	×
Sandhill	Peel O	100
Sand Hill	Compton Q	×
Sandhurst	Lennox O	×
Sand Lake	Muskoka & P. S'd O	×
Sand Point	Renfrew, S. R. O	870
Sand Point	Guysboro N. S	500
Sand Point Road	St. John N. B	×
Sand River	Cumberland N. S	×
* *Sandwich*	Essex, N. R. O	1,400
Sandy Beach	Gaspe Q	500
Sandy Beaches	Lunenburg N. S	×
Sandy Cove	Digby N. S	400
Sandy Point	Shelburne N. S	×
Sangster	Addington O	×
Sarepta	Huron, S. R. O	×
Sargent	Northumberl'd N. B	×
Sarginson	Hastings, N. R. O	×
* *Sarnia*	Lambton, W. R. O	6 692
Sarsfield	Russell O	×
Sartell	King's N. B	×
Saskatchewan	Sask	×
Saskatoon	Sask	×
Sauble Falls	Bruce, N. R. O	×
* *Saugeen*	Bruce, N. R. O	1,250
Saulnierville	Digby N. S	400
Sault au Cochon	Saguenay Q	150
Sault au Recollet	Hochelaga Q	500
Sault Ste. Marie	Algoma O	1,000
Saurin	Simcoe, N. R. O	×
Savage's Mills	Shefford Q	×
Savona's Ferry	Yale B. C	125
Saw Mill Creek	Annapolis N. S	×
Sawyerville	Compton Q	200
Sayabec	Rimouski Q	×
Sayward-Alberni	Vancouver B. C	×
Scatarie Island	Cape Breton N. S	×
* *Scarboro'*	York, E. R. O	350
Scarboro' Junction	York, E. R. O	×
Scarlet Hill	Simcoe, S. R. O	×
Schanzenfelt	Selkirk M	2,000
* *Schomberg*	York, N. R. O	500
Schreiber	Algoma O	×
Scone	Bruce, N. R. O	100
Scotch Block	Halton O	×
Scotchfort	Queen's P. E. I	×
Scotch Lake	York N. B	×
Scotch Line	Lanark O	×
Scotch Ridge	Charlotte N. B	×
Scotch Settlement	Westmoreland N. B	150
Scotch Town	Queen's N. B	150
Scotch Village	Hants N. S	200
Scotia	Muskoka & P. S'd O	×
Scott Junction	Beauce Q	200
Scotland	Oxford, S. R. O	400
Scotsburn	Pictou N. S	×
Scottsville	Inverness N. S	×
Scott's Bay	King's N. S	×
Scott's Bay Road	King's N. S	×
Scottsmore	Missisquoi Q	×
Scottstown	Compton Q	600
Scovill's Mills	Kent N. B	×
Scouten	Addington O	×
Scribner	King's N. B	×
Scugog	Ontario, N. R. O	×
Seaforth	Halifax S	×
* *Seaforth*	Huron, S. R. O	2,800
Sea Cow Head	Prince P. E. I	×
Sea Cow Pond	Prince P. E. I	×
Sea Dog Cove	King's N. B	×
Seagrave	Ontario, S. R. O	100
Sea Gull	Algoma O	×
Sea Island	N. Westminster B. C	×
Sea Side	Restigouche N. B	×
Seal Cove	Charlotte N. B	×
Seaton	York, W. R. O	200
Searletown	Prince P. E. I	×
Sebright	Ontario, N. R. O	×
Sebringville	Perth, S. R. O	450
Seckerton	Lambton, W. R. O	×
Second Falls	Charlotte N. B	500
Second Peninsula	Lunenburg N. S	×
Second Westcock	Westmoreland N. B	×
Seeburn	Marquette M	×
Seely	Muskoka & P. S'd O	×
Seely's Bay	Leeds, S. R. O	300
Seguin Falls	Muskoka & P. S'd O	×
Selby	Lennox O	×
Selkirk	Lisgar M	400
Selkirk	Haldimand O	400
Selkirk Road	Queen's P. E. I	×
Sellarville	Bonaventure Q	×
Selmah	Hants N. S	×
Selton	Elgin, W. R. O	×
Selwyn	Peterboro', W. R. O	×
Serpent River	Algoma O	300
Settrington	Charlevoix Q	×
Seven Islands	Saguenay Q	×
Severn Bridge	Ontario, N. R. O	300
Seville	Elgin, E. R. O	×
Sevogle	Northumberland N. B	×
Sewell	Marquette M	×
Shad Bay	Halifax N. S	×
Shadeland	Selkirk M	×
Shag Harbour	Shelburne N. S	×
Shakespeare	Oxford, N. R. O	600
Shamrock	Renfrew, S. R. O	×
Shamrock	Prince P. E. I	×
Shanklin	St. John N. B	×
Shanly	Grenville, S. R. O	×
Shannon	Queen's N. B	×
Shannon Hall	Muskoka & P. S'd O	×
Shannonvale	Restigouche N. B	×
Shannonville	Hastings, E. R. O	700
Shanty Bay	Simcoe, S. R. O	100
Sharbot Lake	Addington O	×
Sharon	York, N. R. O	300
Sharp	King's N. B	×
Shampton	Frontenac O	200
Shawbridge	Terrebonne Q	200
Shawenegan	St. Maurice Q	×
Shawville	Pontiac Q	800
Sheba	Queen's N. B	×
Shedden	Elgin, W. R. O	×
* *Shediac*	Westmoreland N. B	500
Shediac Bridge	Westmoreland N. B	×
Shediac Road	Westmoreland N. B	×
Sheenboro'	Pontiac Q	×
Sheet Harb. Passage	Halifax N. S	×
Sheffield	Wentworth, N. R. O	200
Sheffield	Sunbury N. B	×
Sheffield Academy	Sunbury N. B	×
Sheffield Mills	King's N. S	200
Sheffington	Shefford Q	×
Shefford Mountain	Shefford Q	100
Shefford Vale	Shefford Q	×
Sheguiandah	Algoma O	150
* *Shelburne*	Grey, E. R. O	1,000
Shelburne	Shelburne N. S	1,000
Sheldon	Cardwell O	×
Sheldrake	Saguenay Q	100
Shellmouth	Marquette M	×
Shell River	Marquette M	×
Shenstone	Albert N. B	×
Shepody Road	King's N. B	×
Sheppardton	Huron, W. R. O	×
Sheppardville	Selkirk M	×
* *Sherbrooke*	Sherbrooke Q	10,110
Sherbrooke	Guysboro' N. S	500

LIST OF POST OFFICES IN CANADA.

POST OFFICE.	ELECTORAL DISTRICT.	POP.
Sheridan	Halton...O	×
Sherkston	Welland...O	100
Sherlock	King's...N. B	×
Sherrington	Napierville...Q	450
Sherwood	York, W. R....O	×
Sherwood Spring	Leeds, S. R....O	×
Shetland	Middlesex, W. R....O	180
Shigawake	Bonaventure...Q	×
Shiloh	Wellington, S. R....O	×
Shinimicas Bridge	Cumberland...N. S	×
Shinnickburn	Northumberland...N. B	×
Ship Harbour	Halifax...N. S	100
Ship Harbour Lake	Halifax...N. S	×
Shipka	Middlesex, N. R....O	100
Shipley	Wellington, N. R....O	×
Shippegan	Gloucester...N. B	500
Shippegan Island	Gloucester...N. B	×
Shirley	Ontario, N. R....O	×
Shoal Lake	Marquette...M	×
Short Beach	Yarmouth...N. S	×
Shorthalme	Queen's...N. B	×
Shouldice	Grey...O	×
Shrewsbury	Argenteuil...Q	×
Shrigley	Grey, E. R....O	×
Shrubmount	York, W. R....O	×
Shubenacadie	Hants...N. S	500
Shulie	Cumberland...N. S	×
Shunacadie	Cape Breton...N. S	×
Shuswap	Yale...B. C	×
Shiney	Marquette...M	×
Shiney Crossing	Hastings, W. R....O	×
Sight Point	Inverness...N. S	×
Sillery Cove	Quebec...Q	450
Sillsville	Lennox...O	×
Siloam	Ontario, W. R....O	×
Silver Creek	Marquette...M	×
Silver Creek	Ottawa...Q	×
Silver Hill	Norfolk, S. R....O	100
Silver Lake	Victoria, N. R....O	×
Silver Mountain	Algoma...O	×
Silver Spring	Selkirk...M	×
Silverstream	Victoria...N. B	×
Silver Water	Algoma...O	×
* *Simcoe*	Norfolk, S. R....O	3,000
Sinclairville	Wentworth, S. R....O	150
Sine	Hastings, N. R....O	×
Singhampton	Simcoe, N. R....O	250
Sittakaw	Marquette...M	×
Six Mile Brook	Pictou...N. S	×
Six Mile Road	Cumberland...N. S	×
Six Nations	Haldimand...O	×
Six Portages	Ottawa...Q	×
Six Roads	Gloucester...N. B	×
Skead's Mills	Carleton...O	500
Skeena	Cariboo...B. C	×
Skinner's Pond	Prince...P. E. I	×
Skipness	Bruce, N. R....O	×
Skir Dhu	Victoria...N. S	×
Skye	Glengarry...O	150
Sky Glen	Inverness...N. S	×
Sky Mountain	Inverness...N. S	×
Sleswick	Cardwell...O	×
Sluice Pond	Yarmouth...N. S	×
Smithfield	Northumberland, E.R...O	200
Smithfield	Guysboro'...N. S	×
Smith's	Westmoreland...N. B	×
Smith's Cove	Digby...N. S	100
Smith's Creek	King's...N. B	×
* *Smith's Falls*	Leeds & Gren., N.R....O	3,000
Smith's Hill	Selkirk...M	×
Smith's Mills	Stanstead...Q	100
Smith Town	King's...N. B	150
Smithurst	Wellington, N. R....O	×
* *Smithville, Lincoln*	Wentworth, S. R....O	600
Snake River	Renfrew, N. R....O	×
Snider Mountain	King's...N. B	×
Snow Flake	Selkirk...M	×
Soda Creek	Cariboo...B. C	110
Soldier's Cove	Richmond...N. S	×
Solina	Durham, W. R....O	150
Solmesville	Prince Edward...O	×
Solway	Bruce, E. R....O	×
Sombra	Bothwell...O	200
Somenos	Vancouver...B. C	×
Somerset	Megantic...Q	1,000
Somerset	King's...N. S	180
Somerset	Prince...P. E. I	×
Somerset	Selkirk...M	×
Somerville	Carleton...N. B	100
Sonora	Guysboro'...N. S	×
Sonya	Ontario, N. R....O	×
Sooke	Vancouver...B. C	×
Soperton	Leeds, S. R....O	×
* *Sorel*	Richelieu...Q	6,669
Souris, East	King's...P. E. I	×
Souris	Selkirk...M	250
Souris City	Selkirk...M	×
Sourisford	Selkirk...M	×
Souris, West	King's...P. E. I	500
South	Lunenburg...N. S	×
Southampton	York...N. B	300
Southampton	Cumberland...N. S	225
South Bar of Sid. Riv.	Cape Breton...N. S	×
South Barnston	Stanstead...Q	100
South Bay	Prince Edward...O	×
South Bay	Victoria...N. S	×
South Bay	St. John...N. B	×
South Bolton	Brome...Q	100
South Branch	Colchester...N. S	×
South Branch (Ken.)	King's...N. B	×
S. Br. St. Nicholas R.	Kent...N. B	×
South Casselman	Russel...O	×
South Cayuga	Monck...O	×
South Clones	Queen's...N. B	×
South Cove	Victoria...N. S	×
South Douro	Peterboro', E. R....O	100
South Dildswell	Wolfe...Q	×
South Dummer	Peterboro', E. R....O	×
* *South Durham*	Drummond...Q	500
South-East Passage	Halifax...N. S	×
South Ely	Shefford...Q	100
South End	Welland...O	×
S. End of Lochaber	Guysboro'...N. S	×
South Esk	Northumberland...N. B	×
South Farmington	Annapolis...N. S	×
South Finch	Stormont...O	100
South Gloucester	Russel...O	150
South Gower	Grenville, N. R....O	200
South Granby	Shefford...Q	×
S. Gut of St. Ann's	Victoria...N. S	×
South Ham	Wolfe...Q	×
S. Head of Cow Bay	Cape Breton...N. S	×
South Indian	Russell...O	×
South Knowlesville	Carleton...N. B	×
South Lake	Leeds, S. R....O	×
South Lake	King's...P. E. I	×
South Lancaster	Glengarry...O	×
South Louisburg	Cape Breton...N. S	×
South Maitland	Hants...N. S	×
South March	Carleton...Q	125
South Marland	Guysboro'...N. S	×
South Middleton	Norfolk, N. R....O	×
South Monaghan	Peterboro', W. R....O	180
South Mountain	Dundas...O	350
South Nelson	Northumberland...N. B	×
South Nelson Road	Northumberland...N. B	×
South Ohio	Yarmouth...N. S	×
Southport	Queen's...P. E. I	100
South Quebec	Levis...Q	×
South Range	Digby...N. S	×
South Rawdon	Hants...N. S	300
South Renous	Northumberland...N. B	×
South River	Muskoka & P. S'd...O	×
South Rockland	Westmoreland...N. B	×
South Roxton	Shefford...Q	×
S. S. Bush Riv. Denis.	Inverness...N. S	×
S. Side Baddeck R.	Victoria...N. S	×
S. Side Boulardarie	Victoria...N. S	×
S. S. Cocagne River	Kent...N. B	×
S. S. Whycocomagh B.	Inverness...N. S	×
South Stukely	Shefford...Q	200
South Tilley	Victoria...N. B	×
South Vale	Colchester...N. S	×
South Victoria	Cumberland...N. S	×
Southville	Digby...N. S	×
South W. Margaree	Inverness...N. S	×
South-West Mabou	Inverness...N. S	125
South-West, Lot 16	Prince...P. E. I	×
South-West Point	Gaspe...Q	×
South Wiltshire	Queen's...P. E. I	×
Southwold Station	Elgin, W. R....O	×
South Woodslee	Essex, N. R....O	150
South Zorra	Oxford, N. R....O	100
Sowerby	Algoma...O	×
Spaffordton	Addington...O	100
Spanish River	Algoma...O	100
Sparta	Elgin, E. R....O	500
Spa Springs	Annapolis...N. S	×
Sparrow Lake	Ontario, N. R....O	×
Speedside	Wellington, S. R....O	×
Speerville	Carleton...N. B	×
Speitche's Cove	Digby...N. S	×
Spence	Muskoka & P. S'd...O	×
Spence	Westmoreland...N. B	×
Spencer Cove	Quebec...Q	×
Spencer's Island	Cumberland...N. S	×
* *Spencerville*	Grenville, S. R....O	400
Spence's Bridge	Yale...B. C	115
Speyside	Halton...O	×
Spillimacheen	Yale...B. C	×
Spires	Wellington, C. R....O	×
Spring Arbour	Norfolk, S. R....O	400
Springbank	Middlesex, N. R....O	×
Spring Brook	Middlesex, N. R....O	×
Spring Brook	Hastings, N. R....O	×
Springbrook	Dorchester...Q	×
* *Springfield*	Middlesex, E. R....O	700
Springfield	Lisgar...M	×
Springfield	King's...N. B	300
Springfield	York...N. B	×
Springfield	Annapolis...N. S	200
Springfield	Queen's...P. E. I	×
Springford	Oxford, S. R....O	402
Spring Hill	Compton...Q	×
Spring Hill Junc.	Cumberland...N. S	×
Spring Hill	York...N. B	250
* *Spring Hill Mines*	Cumberland...N. S	1,500
Springvale	Haldimand...O	100
Spring Valley	Leeds, S. R....O	150
Springville	Peterboro', W. R....O	×
Springville	Pictou...N. S	356
Sprucedale	Muskoka & P. S'd...O	×
Spruce Grove	Ottawa...Q	×
Spruce Lake Station	St. John...N. B	×
Spruce Lake	St. John...N. B	×
Spry	Bruce, N. R....O	×
Spry Bay	Halifax...N. S	216
Spryfield	Halifax...N. S	×
Staffa	Perth, S. R....O	105
Stafford	Renfrew, N. R....O	305
Stegsburn	Ottawa...Q	×
Stamford	Welland...O	305
Stanbridge, East	Missisquoi...Q	400
Stanbridge Ridge	Missisquoi...Q	×
Stanbridge Station	Missisquoi...Q	300
Stanbury	Missisquoi...Q	×
Standon	Dorchester...Q	×
Stanfold	Arthabaska...Q	600
Stanhope	Stanstead...Q	×
Stanhope	Queen's...P. E. I	×
Stanley	York...N. B	500
Stanley Bridge	Queen's...P. E. I	150
Stanleydale	Muskoka & P. S'd...O	×
Stanley's Mills	Peel...O	150
Stanleyville	Lanark, S. R....O	200
* *Stanstead*	Stanstead...Q	1,000
Stanstead Junction	Stanstead...Q	×
Stanton	Simcoe, S. R....O	110
Stanwood	Northumberl'd, E. R....O	×
Stardale	Prescott...O	×
Starkey's	Queen's...N. B	100
Starkville	Durham, W. R....O	×
Star Lake	Muskoka & P. S'd...O	×
Starnesboro'	Huntingdon...Q	×
Starrat	Muskoka & P. S'd...O	×
* *Stayner*	Simcoe, N. R....O	1,450
Staynerville	Argenteuil...Q	×
Steam Mill Village	King's...N. S	×
Steele	Simcoe, E. R....O	×
Steep Creek	Guysboro'...N. S	180
Steevescote	Albert...N. B	×
Steeve's Mountains	Westmorland...N. B	×
Steeve's Settlement	Westmorland...N. B	×
Steinbach	Provencher...M	×
Stella	Lennox...O	×
* *Stellarton*	Pictou...N. S	2,000
Sterling Falls	Muskoka...O	×
* *Stevensville*	Welland...O	300
Stewart	Kent...O	×
Stewart Bay	Muskoka & P. S'd...O	×
Stewarton	King's...N. B	×
Stewartville	Renfrew, S. R....O	×
Stewiacke C. Roads	Colchester...N. S	×
Still Water	Guysboro'...N. S	×
* *Stirling*	Hastings, N. R....O	1,050
Stirling	Richmond...N. S	×
Stirton	Wellington, C. R....O	136
Stittsville	Carleton...O	200
Stiles Village	Westmorland...N. B	×
Stockdale	Northumberland, E.R...O	150
Stockton	Selkirk...M	×
Stockwell	Chateauguay...Q	×
Stoco	Hastings, E. R....O	×
Stoddarts	Annapolis...N. S	×
Stodderville	Selkirk...M	×
Stoke Centre	Richmond...Q	×
Stokes Bay	Bruce, N. R....O	×
Stoketon	Richmond...Q	×
Stonyfield	Argenteuil...Q	350
Stoneham	Quebec...Q	400
Stonehaven	Gloucester...N. B	×
Stone House	Cumberland...N. S	×
Stoneleigh	Ontario, N. R....O	×
Stone Quarry	Welland...O	×
Stonewall	Lisgar...M	400
Stoney Mountain	Lisgar...M	200
Stony Creek	Wentworth, S. R....O	250
Stony Creek	Albert...N. B	×
Stony Lake	Peterboro', E. R....O	×
Stony Point	Essex, N. R....O	320
Stormont	Guysboro'...N. S	×
Stornoway	Compton...Q	150
Stottville	St. John's...Q	200
* *Stouffville*	Ontario, N. R....O	1,000
Strabane	Wentworth, N. R....O	218
Strader's Hill	Dundas...O	×
Straffordville	Elgin, E. R....O	415
Strange	York, N. R....O	×
Strangfield	Kent...O	×
Strasburg	Waterloo, S. R....O	×
Strassburg	...Assa	×
* *Stratford*	Perth, N. R....O	9,501
Strathabo	Northumberland...N. B	×
Strathadam	Northumberland...N. B	×
Strathallan	Oxford, N. R....O	×
Strathavon	Grey, N. R....O	×
Strathburn	Middlesex, W. R....O	×
Strathclair	Marquette...M	×
Stratherne	Selkirk...M	×
Strathewen	Lisgar...M	×
Strathlorne	Inverness...N. S	×
Strathnairn	Grey, E. R....O	×
* *Strathroy*	Middlesex, W. R....O	3,900
Street's Ridge	Cumberland...N. S	×
* *Streetsville*	Peel...O	815
Stromness	Monck...O	150
Stronach Mountain	Annapolis...N. S	×
Stroud	Simcoe, S. R....O	200
Stuartburn	Provencher...M	×
Sturgeon	King's...P. E. I	200
Sturgeon Bay	Simcoe, E. R....O	200
Sturgeon Falls	Dist. of Nipissing...O	200
Sturgeon Point	Victoria, N. R....O	×
Stymiest Settlement	Northumberland...N. B	×
Sudbury	Algoma...O	800
Suffield	Sherbrooke...Q	×
Sugar Loaf	Victoria...N. S	×
Sumas	N. Westminster...B. C	×
Summerberry	Assiniboia Ter.	×
Summerfield	Carleton...N. B	×
Summer Hill	Queen's...N. B	×
Summerside	Prince...P. E. I	2,860
Summerside	Antigonishe...N. S	×
Summerstown	Glengarry...O	200
Summerville	Peel...O	250
Summerville	King's...P. E. I	×
Summerville	Hants...N. S	150
Summerville Centre	Queen's...N. S	×
Sumner	Assiniboia Ter.	×
Sunbury	Frontenac...O	×
Sunderland	Ontario, N. R....O	500
Sundridge	Muskoka & P. S'd...O	200
Sundridge	Pictou...N. S	×
Sunnidale Corners	Simcoe, N. R....O	×
Sunnidale	Simcoe, N. R....O	×
Sunnybrae	Pictou...N. S	200
Sunnymede	Assiniboia Ter.	×
Sunnyside	King's...N. S	×
Sunnyside	Lisgar...M	×
Sunnyside	Restigouche...N. B	×
Sunshine	Huron, E. R....O	×
Surette Island	Yarmouth...N. S	×
Surrey	Albert...N. B	×
Sussex Corner	King's...N. B	300
Sussex Portage	King's...N. B	×
Sussex Vale	King's...N. B	1,500
Sutherland's Cor.	Middlesex, W. R....O	100
Sutherlands Mills	Pictou...N. S	×
Sutherland's River	Pictou...N. S	150
Sutton	Brome...Q	400
Sutton Junction	Brome...Q	×
* *Sutton West*	York, N. R....O	400
Swan Creek	Sunbury...N. B	×
Swan Lake	Selkirk...M	×
Swansburg	Shelburne...N. S	×
Sweaburg	Oxford, S. R....O	100
Sweeneyville	Kent...N. B	×
Sweetsburg	Missisquoi...Q	300
Swet's Corners	Leeds, S. R....O	×
Swift Current	Assiniboia Ter.	×
Swindon	Muskoka & P. S'd...O	×
Switzerville	Lennox...O	×
* *Sydenham*	Addington...O	600
Sydenham Place	Drummond...Q	×
Sydney	Cape Breton...N. S	3,000
Sydney Forks	Cape Breton...N. S	×
Sydney Mines	Cape Breton...N. S	1,500
Sykeston	Lambton, W. R....O	×
Sylvan	Middlesex, N. R....O	×
Synton	Albert...N. B	×
Sypher's Cove	Queen's...N. B	×
Table Falls	Argenteuil...Q	×
Tabusintac	Northumberland...N. B	600
Tadousac	Saguenay...Q	160
Talbotville Royal	Elgin, W. R....O	×
Tamworth	Addington...O	500
Tancook Island	Lunenburg...N. S	×
Tangier	Halifax...N. S	900
Tansley	Halton...O	×
Tapleytown	Wentworth, S. R....O	×
Tara	Bruce, N. R....O	810
Tarbert	Wellington, N. R....O	×
Tarbut	Victoria...N. S	×
Tatamagouche	Colchester...N. S	500
Tatamagouche Mt	Colchester...N. S	×
Tatlock	Lanark, N. R....O	×
Taunton	Ontario, S. R....O	200
Tavistock	Oxford, N. R....O	1,000
Taylor Village	Westmoreland...N. B	100
Tay Mills	York...N. B	×
Tay Settlement	York...N. B	×
Tayside	Stormont...O	×
Tecumseh	Essex, N. R....O	100
* *Teeswater*	Bruce, E. R....O	1,050
Teeterville	Norfolk, N. R....O	300
Tehkummah	Algoma...O	×
Telfer	Middlesex, E. R....O	×
Temperance Vale	York...N. B	×
Temperanceville	York, N. R....O	×
Temple	York...N. B	×
Templeton	Ottawa...Q	2,000
Tempo	Middlesex, S. R....O	×
Tenby Bay	Algoma...O	×
Tenecape	Hants...N. S	×
Ten Mile Creek	St. John...N. B	×
Ten Mile House	Queen's...P. E. I	×
Tennant's Cove	King's...N. B	×
Tennyson	Lanark, S. R....O	×
Terence Bay	Halifax...N. S	×
Terrebonne	Terrebonne...Q	1,350
Tessierville	Rimouski...Q	×
Teston	York, W. R....O	100
Tete a Gauche R. N. S.	Gloucester...N. B	×
Tete a Gauche R. S. S.	Gloucester...N. B	×
Teviotdale	Wellington, N. R....O	100
Tewkesbury	Quebec...Q	150
Texas River	York...N. B	×
Thamesford	Oxford, N. R....O	250
* *Thamesville*	Bothwell...O	300
Thanet	Hastings, N. R....O	×
The Barony	York...N. B	×
The Brook	Russell...O	×
* *Thedford*	Lambton, E. R....O	650
The Falls	Colchester...N. S	×
The Gore	Middlesex, E. R....O	×
The Grange	Cardwell...O	×
The Grove	Middlesex, E. R....O	×
The Lake	Russell...O	×
The Points, W. Bay	Richmond...N. S	×
The Range	Queen's...N. B	×
The Ridge	Hastings, N. R....O	×
Thessalon	Algoma...O	×
Thetford Mines	Megantic...Q	×
Thistletown	York, W. R....O	150
Thomasburg	Hastings, E. R....O	100
Thomond	King's...N. B	×
Thompson	Algoma...O	×
Thompsonville	Simcoe, S. R....O	400
Thompson's Mills	Cumberland...N. S	×
Thorburn	Pictou...N. S	500
Thornbrook	King's...N. B	×
Thornbury	Grey, E. R....O	1,150
Thornby	Pontiac...Q	×
Thorndale	Middlesex, E. R....O	200
Thorn Centre	Pontiac...Q	×
Thorncliffe	Kent...O	×
Thornetown	Queen's...N. B	150
* *Thornhill*	York, W. R....O	850
Thornhill	Selkirk...M	×
Thornton	Simcoe, S. R....O	200
Thorneville	Annapolis...N. S	×
Thornyhurst	Bothwell...O	×
* *Thorold*	Welland...O	2,500
Thorpe	Lennox...O	×
Three Brooks	Victoria...N. B	×
Three Lakes	Beauce...Q	×
Three Mile House	St. John...N. B	×
Three Mile House	Halifax...N. S	×
* *Three Rivers*	Three Rivers...Q	8,331
Three Sisters	Cumberland...N. S	×
Three Tree Creek	Sunbury...N. B	×
Throoptown	Grenville, S. R....O	×
* *Thurso*	Ottawa...Q	×
Thwaite	Hastings, N. R....O	×
Tichborne	Addington...O	×
Tidnish	Cumberland...N. S	×
Tidnish Bridge	Westmoreland...N. B	150
Tignish	Prince...P. E. I	450
Tikonabe	Chicoutimi...Q	×
Tilbury Centre	Essex, N. R....O	1,000
Tilley	Victoria...N. B	×
Tilley	Leeds, S. R....O	×
Tilley Road	Gloucester...N. B	×
* *Tilsonburg*	Norfolk, N. R....O	2,200
Tilton	Northumberland, E. R. O	×
Tintern	Lincoln...O	×
Tioga	Simcoe, S. R....O	×
Titusville	King's...N. B	100
Tiverton	Bruce, W. R....O	750
Tiverton	Digby...N. S	250
Tobermory	Bruce, N. R....O	×
Tobique River	Victoria...N. B	×
Todburn	Marquette...M	×
Toledo	Brockville...O	400
Toney River	Pictou...N. S	×
Topping	Oxford, N. R....O	×
Tooleton	King's...N. B	×
Torbay	Guysboro'...N. S	300
Torbrook	Annapolis...N. S	300
Tormore	York, W. R....O	×
* *Toronto*	Toronto...O	181,220
* *Toronto North*, Cor.	Yonge & Carlton Sts....	×
* *Toronto East*, Cor.	Queen & Parl'm't "...	×
* *Toronto West*, Cor.	Queen & Bathurst "...	×
Torrance	Simcoe, E. R....O	×
Totonka	Marquette...M	×
* *Tottenham*	Simcoe, S. R....O	750
Touchwood Hills	...Assa	100
Tower Hill	Charlotte...N. B	×
Town Plot	King's...N. S	×
Townsend Centre	Norfolk, N. R....O	107
Toy's Hill	Dundas...O	×
Tracadie	Gloucester...N. B	1,200
Tracadie	Antigonishe...N. S	1,700
Travallie Cross	Queen's...P. E. I	×
Tracey's Mills	Carleton...N. B	100
Tracey Station	Sunbury...N. B	250
Tracyville	Sunbury...N. B	×
Trafalgar	Halton...O	×
Trafalgar	Guysborough...N. S	×
Trafford	Addington...O	×
Tralee	Perth, N. R....O	×
Tramore	Renfrew, N. R....O	×
Traverston	Grey, S. R....O	×
Traveller's Rest	Prince...P. E. I	×
Treadwell	Prescott...O	×
Treecastle	Wellington, N. R....O	×
Tregarva	...Assa	×
Treherne	Marquette...M	×
Tremblay	Chicoutimi...Q	×
Tremont	King's...N. S	×
Trenholm	Drummond...Q	100
Trent Bridge	Northumberl'd, E. R. O	×
Trenton	Pictou...N. S	×
* *Trenton*	Hastings, W. R....O	4,500
Tring Station	Beauce...Q	×
Trois Pistoles	Temiscouata...Q	×
Trois Saumons	L'Islet...Q	500
Trout Brook	Northumberland...N. B	100
Trout Brook	Arthabaska...Q	200
Trout Brook	Cape Breton...N. S	×
Trout Lake	Muskoka & P. S'd...O	×
Trout River	Huntingdon...Q	×
Trout River	Inverness...N. S	×
Trowbridge	Perth, N. R....O	×
Troy	Wentworth, N. R....O	×
Trudell	Essex, N. R....O	×
Truemanville	Cumberland...N. S	×
Truro	Colchester...N. S	5,102
Tryon	Prince...P. E. I	×
Tuam	Simcoe, S. R....O	×
Tuftsville	Hastings, W. R....O	×
Tullamore	Peel...O	120
Tupperville	Annapolis...N. S	153
Tupperville	Bothwell...O	×
Turin	Elgin, W. R....O	×


Longitude West from Greenwich
68
69
70
71
49
48
47
SAGUENAY
CHICOUTIMI
MONTMORENCY
CHARLEVOIX
KAMOURASKA
TEMISCOUATA
RIMOUSKI
L'ISLET
MADAWASKA
QUEBEC
TADOUSAC
MURRAY BAY
Lake St. John
Isle Verte
Trois Pistoles
Cacouna
St. Jean Port Joli
LINE OF EXPLORATION
INTERCOL. R.R.



EAST CENTRAL PART

OF

QUEBEC

Geo. F. Cram, Engraver,

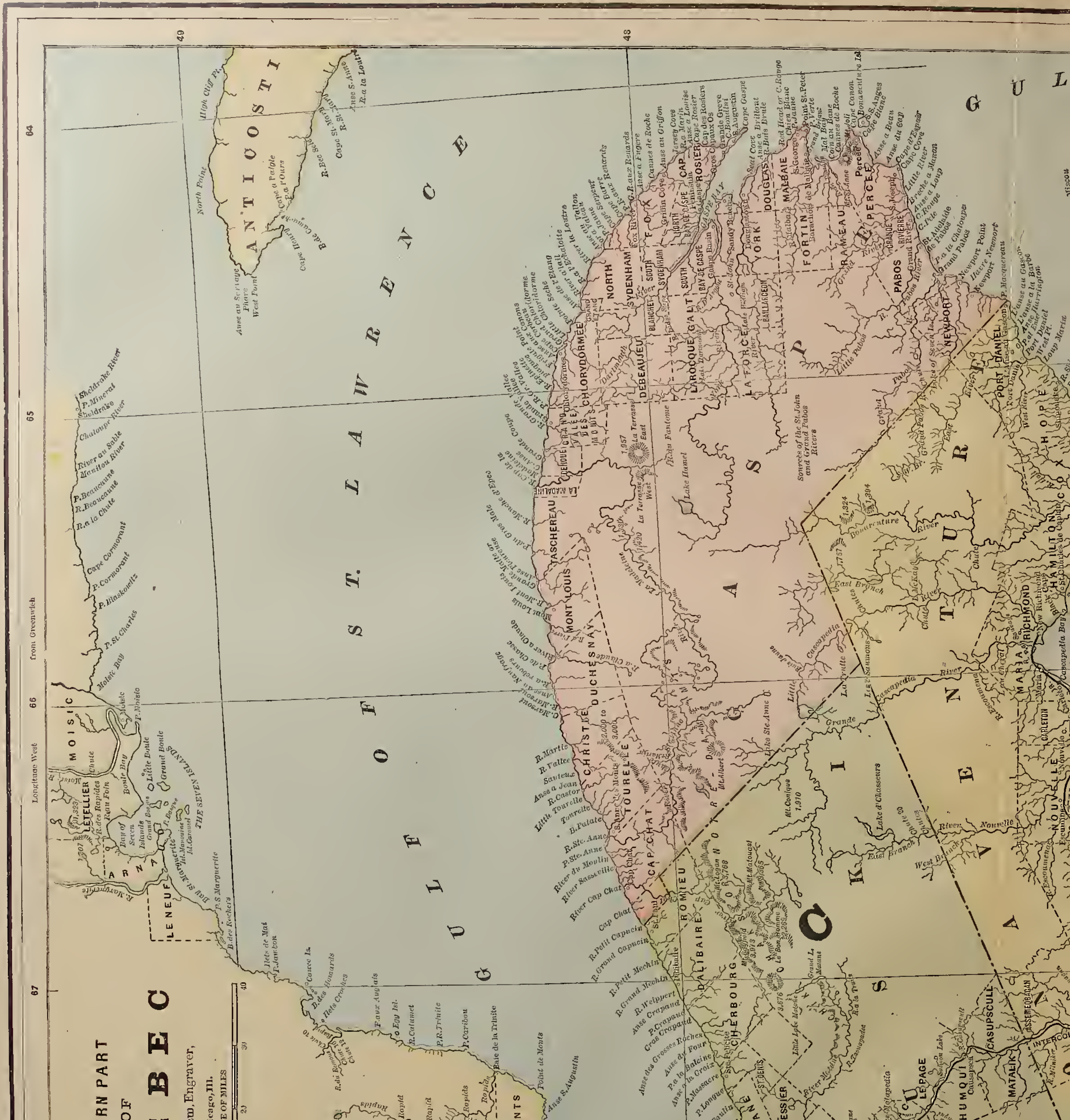
Chicago, Ill.

SCALE OF MILES.
0 2 4 6 8 10 15 20 30 40
46
45
6
7
8
Longitude West from Washington
MAINE
PISCATAQUIS
SOMERSET
FRANKLIN
OXFORD
COOS
ESSEX
NEW HAMPSHIRE
UNITED STATES
MEGANTIC
BEAUCE
DORCHESTER
BELLECHASSE
MONTMAGNY
WOLFE
COMPTON
Quebec
Levis
Lake Moosehead
Lake Chesuncook
Greenville Centre
Bingham
Solon
Colebrook

POST OFFICE.	ELECTORAL DISTRICT.	POP.
Turnerville	Bothwell O	×
Turtle Creek	Albert N. B	150
Turtle Lake	Muskoka & P. S'd O	×
Turtle Mountain	Selkirk M	×
Tuscarora	Brant, S R. O	×
Tusket	Yarmouth N. S	458
Tusket Wedge	Yarmouth N. S	×
Tweed	Hastings, E. R. O	750
Tweedside	Wentworth, S. R. O	×
Tweedside	York N. B	×
Twin Elm	Carleton O	×
Two Islands	Cumberland N. S	×
Two Rivers	Marquette M	×
Two Rivers	Cumberland N. S	×
Tyne Valley	Prince P. E. I	×
Tyneside	Haldimand O	×
Tyrconnell	Elgin, W. R. O	200
Tyrone	Durham, W. R. O	300
Tyrrell	Norfolk, N. R. O	×
Udora	Ontario, N. R. O	250
Uffington	Ontario, N. R. O	×
Ufford	Muskoka & P. S'd O	×
Uhthoff	Simcoe, E. R. O	200
Ullswater	Muskoka & P. S'd O	×
Ulverton	Drummond Q	300
Umfraville	Hastings, N. R. O	×
Underwood	Bruce, W. R. O	120
Uniline	Victoria N. B	×
Union	Elgin, E. R. O	300
Union Corner	Carleton N. B	×
Union Centre	Pictou N. S	×
Union Road	Queen's P. E. I	×
Union Spring	Leeds, S. R. O	×
* *Unionville*	York, E. R. O	500
Upham	King's N. B	200
Upham Station	King's N. B	×
Uphill	Victoria, N. R. O	×
Uplands	Muskoka & P S'd O	×
Upper	Monck O	×
Upper Abougoggin	Westmoreland N. B	×
Upper Bay du Vin	Northumberland N. B	×
Upper Bedford	Missisquoi Q	×
Upper Big Tracadie	Guysboro' N. S	×
Upper Branch	Lunenburg N.	×
Upper Brighton	Carleton N.	50
Upper Burton	Sunbury N. B	×
Upper Buctouche	Kent N. B	×
Upper Caledonia	Guysboro' N. S	×
Upper Canard	King's N. S	[illegible]
Upper Cape	Westmoreland N. B	×
Upper Caraquet	Gloucester N. B	[illegible]
Upper Clarence	Annapolis N. S	×
Upper Caverhill	York N. B	×
Upper Clements	Annapolis N. S	×
Upper Clyde River	Shelburne N. S	×
Upper Coal Creek	Queen's N. B	×
Upper Coverdale	Albert N. B	×
Up Cr. Rds. St. M'ys	Guysboro' N. S	×
Upper Dyke Village	King's N. S	×
Upper Economy	Colchester N. S	250
Up. Fort Lawrence	Cumberland N. S	×
Upper Gagetown	Queen's N. B	×
Upper Gaspereaux	Queen's N. B	×
Upper Goshen	Albert N. B	×
Upper Granville	Annapolis N. S	×
Upper Greenwich	King's N. B	×
Upper Hampstead	Queen's N. B	×
Upper Hayneville	York N. B	150
Upper Kennetcook	Hants N. S	×
Upper Kent	Carleton N. B	250
Upper Keswick	York N. B	150
Up. Keswick Ridge	York N. B	×
Upper Kincardine	Victoria N. B	×
Upper Kintore	Victoria N. B	×
Upper Knoxford	Carleton N. B	×
Upper La Have	Lunenburg N. S	132
Up. Leitche's Creek	Cape Breton N. S	×
Upper Loch Lomond	St. John N. B	×
Upper Magaguadavic	York N. B	×
Upper Malagash	Cumberland N. B	×
Upper Margaree	Inverness N. S	×
Upper Maugerville	Sunbury N. B	×
Upper Melbourne	Richmond Q	×
Upper Mills	Charlotte N. B	×
Upper Musquodoboit	Halifax N. S	1,500
Upper Neguac	Northumberland N. B	×
Upper New Horton	Albert N. B	×
Upper Newport	Hants N. S	×
Upper Nine Mile River	Hants N. S	×
Upper North River	Colchester N. S	×
Upper Otnabog	Queen's N. B	×
Upper Peel	Carleton N. B	×
Upper Pereaux	King's N. S	×
Upper P'nt de Bute	Westmoreland N. B	×
Upper Port Latour	Shelburne N. S	×
Upper Queensbury	York N. B	200
Upper Rawdon	Hants N. S	350
Upper Rockport, W. O.	Westmoreland N. B	×
Upper St. Bazil	Victoria N. B	×
Upper St. Francis	Victoria N. B	×
Upper Sackville	Westmoreland N. B	250
Upper Sackville	Halifax N. S	×
Upper Set. Baddeck R.	Victoria N. S	×
Upper Set Middle R.	Victoria N. S	×
Upper Set. South R	Antigonishe N. S	×
Upper Sheffield	Sunbury N. B	×
Upper Southampton	York N. B	×
Upper Stewiacke	Colchester N. S	250
Upper Sumas	N. Westminster B. C	100
Upperton	King's N. B	×
Upper Wakefield	Ottawa Q	×
Upper Washabuck	Victoria N. S	×
Upper Wicklow	Carleton N. B	×
Upper Wood Har.	Shelburne N. S	×
Upper Woodstock	Carleton N. B	×
Uptergrove	Ontario, N. R. O	200
Urbania	Hants N. S	×
Urquharts	King's N B	×
Ursa	Peterboro', E. R. O	×
Usher	Antigonishe N. S	×
Utica	Ontario, N. R. O	100
Utoka	Wellington, S. R O	×
Utopia	Simcoe, S. R. O	×
Utterson	Muskoka & P. S'd O	850
Uttoxeter	Lambton, W. R. O	150
* *Uxbridge*	Ontario, W. R. O	2,200
Vachell	York, N. R. O	100
Valcartier	Quebec Q	×
Valcartier Vill	Quebec Q	×
Valcourt	Shefford Q	×
Val des Bois	Ottawa Q	×
Valencay	Ottawa Q	×
Valens	Wentworth O	×
Valentia	Victoria, S. R. O	×
Vale Perkins	Brome Q	×
Valetta	Kent O	100
Vallentyne	Ontario, N. R. O	×
Valletort	Beauce Q	×
Valleyfield	Beauharnois Q	5,516
Valleyfield	King's P. E. I	100
Valley Mills	Inverness N. S	×
Valley Station	Colchester N. S	×
Valmont	Champlain Q	×
Valois	Jacques-Cartier Q	400
Vanatter	Wellington, C. R. O	×
Vanburgh	Renfrew, S. R. O	×
Vancamp	Dundas O	×
Vancouver	N. Westminster B. C	13,685
Vandecar	Oxford, S. R. O	×
Vandeleur	Grey, S. R. O	×
Vanessa	Norfolk, N. R. O	×
Van Horn	Kent O	×
* *Vankleek Hill*	Prescott O	929
Vankoughnet	Ontario, N. R. O	×
Vanneck	Middlesex, E. R. O	×
Vanvlack	Simcoe O	×
Van Winkle	Cariboo B. C	×
Varency	Norfolk, S. R. O	×
Varennes	Vercheres Q	900
Varna	Huron, S. R. O	125
Varney	Grey, S. R. O	×
Vars	Russell O	×
Vasey	Simcoe, E. R. O	×
Vaucluse	L'Assumption Q	×
Vaudreuil	Vaudreuil Q	500
Vaudreuil Station	Vaudreuil Q	200
Vaughan	Hants N. S	×
Vellore	York, W. R. O	150
Venice	Missisquoi Q	×
Vennachar	Addington O	×
Venosta	Ottawa Q	×
Ventnor	Grenville, S. R. O	×
Ventry	Grey, E. R. O	×
Vercheres	Vercheres Q	900
Verdun	Bruce, W. R. O	×
Vereker	Essex, S. R. O	×
Vermillion Bay	Algoma O	×
Vernal	Antigonishe N. S	×
Verner	Nipissing O	×
Vernet	Ottawa Q	×
Vernon	Russell O	125
Vernon Mines	King's N. S	×
Vernon River	Queen's P. E. I	125
Vernon Riv. Bridge	Queen's P. E. I	×
Vernonville	Northumb., W. R. O	100
Verona	Addington O	250
Versailles	Iberville Q	200
Verschoyle	Oxford, S. R. O	×
Vert Island	Algoma O	×
Ves.	Bruce, E. R. O	×
Vesuvius	King's N. S	×
Vical	Huntingdon Q	×
Victor	Norfolk, S. R. O	×
Victoria	Victoria B. C	16,841
Victoria	Carleton N. B	×
Victoria	Cumberland N. S	100
Victoria	Queen's P. E. I	200
Victoria Beach	Annapolis N. S	×
Victoria *Cross*	King's P. E. I	×
Victoria Corner	Ontario, N. R. O	×
Victoria Harbour	King's N. S	×
* *Victoria Harbour*	Simcoe, E. R. O	300
Victoria Mines	Cape Breton N. S	350
Victoria Road	Victoria, N. R. O	200
Victoria Square	York, E. R. O	110
Victoria Vale	Annapolis N. S	×
* *Victoriaville*	Arthabaska Q	2,000
Victory	Queen's N. B	×
* *Vienna*	Elgin, E. R. O	600
Vienneau	Northumberland N. B	×
Vienots	Lunenburg N. S	×
Viger	Temiscouata Q	×
Vigo	Simcoe, N. R. O	×
Villagedale	Shelburne N. S	×
Village des Aulnaies	L'Islet Q	×
Village Richelieu	Rouville Q	300
Villa Mastai	Quebec Q	×
Villanova	Norfolk, N. R. O	150
Villette	Compton Q	150
Villiers	Peterboro', E. R. O	×
Vincennes	Champlain Q	×
Vine	Simcoe, S. R. O	×
Vinton	Pontiac Q	×
Viola Dale	Marquette M	×
Violet	Lennox O	100
Violet Hill	Cardwell O	×
Virden	Selkirk M	350
Virgil	Lincoln & Niagara O	150
Virginia	York, N. R. O	×
* *Vittoria*	Norfolk, S. R. O	600
Vivian	Ontario, W. R. O	×
Vogler's Cove	Lunenburg S	150
Vroomanton	Ontario, N. R. O	900
Vyner	Lambton, W. R. O	×
Waasis Station	Sunbury N. B	×
Wabash	Bothwell O	×
Wagram	Wellington, N. R. O	×
Wahnapitae	Nipissing O	×
Wakefield	Ottawa Q	150
Wakopa	Selkirk M	×
Waldemar	Wellington, N. R. O	200
Wales	Stormont O	300
Walker's	Middlesex, W. R. O	×
Walker's Cutting	Arthabaska Q	×
Walker's Point	Simcoe, E. R. O	×
Walker's Settlement	King's N. B	×
* *Walkerton*	Bruce, E. R. O	3,000
Walkerville	Essex, N. R. O	1,000
Wallace	Wellington, N. R. O	×
Wallace	Cumberland N. S	400
Wallace	Assa	×
Wallace Bridge	Cumberland N. S	×
* *Wallaceburg*	Bothwell O	2,000
Wallace Grant	Lunenburg N. S	×
Wallace Ridge	Cumberland N. S	×
Wallacetown	Elgin, W. R. O	400
Wallbridge	Hastings, W. R. O	×
Wallbrook	King's N. S	×
Wallenstein	Waterloo, N. R. O	×
Waller	Russell O	×
Walmer	Oxford, N. R O	×
Walnut	Lambton, E. R. O	×
Walsh	Norfolk, S. R. O	120
Walsingham Centre	Norfolk, S. R. O	800
Walter's Falls	Grey, N. R. O	150
Waltham	Pontiac Q	×
Walton	Huron, S. R. O	125
Walton	Hants N. S	600
Walton's Lake	King's N. B	×
Waneche	Selkirk M	×
Wanstead	Lambton, W. R. O	150
Wapalm	Selkirk M	×
Wapella	Assa	×
Warburton	Leeds, S. R. O	×
Warden	Shefford Q	250
Ward's Creek Road	King's N. B	×
* *Wardsville*	Middlesex, W. R O	600
Wareham	Grey, E. R. O	×
Warina	Stormont O	100
Warkworth	Northumberland, E. R. O	800
Wariston	Hastings, N. R. O	×
Warleigh	Marquette M	×
Warminster	Simcoe, E. R. O	×
Warner	Wentworth, S. R. O	×
Warrington	Selkirk M	×
Warsaw	Peterboro', E. R. O	150
Wartburg	Perth, N. R. O	×
Warwick	Arthabaska Q	800
Warwick	Lambton, E. R. O	150
Washago	Simcoe, E. R. O	250
Washburn	Frontenac O	×
Washington	Brant, N. R. O	100
Waskada	Selkirk M	×
Wascana	Assa	×
Wassewa	Selkirk M	×
Waterborough	Queen's N. B	100
* *Waterdown*	Wentworth, N. R. O	1,000
* *Waterford*	Norfolk, N. R O	1,300
Waterford	Digby N. S	×
Waterford	King's N. B	×
Waterford	Prince P. E. I	×
Waterloo	Lunenburg N. S	×
* *Waterloo*	Shefford Q	2,500
* *Waterloo*	Waterloo, N. R. O	2,250
Waternish	Guysboro' N. S	×
Waterside	Albert N. B	×
Waterton	Leeds, S. R. O	×
Watervale	Pictou N. S	×
Waterville	Compton Q	250
Waterville	Carleton N. B	500
* *Waterville*	King's N. S	175
* *Watford*	Lambton, E. R. O	1,600
Watkins Mills	Drummond Q	×
Watienwyl	Muskoka & P. S'd O	×
Watson's Corners	Lanark, N. R. O	100
Watson Settlement	Carleton N. B	×
Watt Section, S. Har.	Halifax N. S	×
Wattsview	Marquette M	×
Waubamick	Muskoka & P. S'd O	×
* *Waubaushene*	Simcoe, E. R. O	600
Waubuno	Lambton, W. R. O	×
Waugh's River	Colchester N. S	×
Waupoos	Prince Edward O	×
Waverley	Simcoe, E. R. O	100
Waverley	Halifax N. S	600
Wavy Bank	Lisgar M	×
Waweig	Charlotte N. B	×
Wawota	Assa	×
Wayerton	Northumberland N. B	×
Way's Mills	Stanstead Q	250
Weaver Settlement	Digby N. S	×
Webster's Corner	Queen's P. E. I	×
Weedon	Wolfe Q	220
Weedon Centre	Wolfe Q	×
Weedon Station	Wolfe Q	×
Wehlmann	Lambton O	150
Weir	Brant O	×
Weissenburg	Waterloo, N. R. O	100
Welcome	Durham, E. R. O	×
Weldford	Kent N. B	×
Weldon	Kent O	×
* *Welland*	Welland O	2,400
Welland Port	Monck O	200
* *Wellesley*	Waterloo, N. R. O	700
Wellington	Prince P. E. I	×
Wellington	Marquette M	×
Wellington	Prince Edward O	800
Wellington	Albert N. B	×
Wellington	Vancouver B. C	600
Wellington	Yarmouth N. S	×
Wellington Station	Prince P. E. I	×
Wellman's Corners	Hastings, N. R. O	100
Wells	Kings N. B	×
Wellwood	Marquette M	×
Welsford	Queen's N. B	×
Welwyn	Assa	×
Wendigo	Middlesex, W. R. O	×
Wendover	Prescott O	250
Wentworth	Cumberland N. S	100
Wentworth Creek	Hants N. S	×
Wentworth Station	Cumberland N. S	×
West Advocate	Cumberland N. S	×
West Arichat	Richmond N. S	100
Wesley Church	Addington O	×
Wesley Park	Welland O	×
Wesleyville	Durham, E. R. O	×
West Bay	Inverness N. S	200
West Bolton	Brome Q	×
Westbourne	Marquette M	100
W. Br. St. Nicholas R.	Kent N. B	×
W. Br'ch River John	Pictou N. S	×
W. Br'ch Riv. Philip	Cumberland N. S	×
West Brome	Brome Q	150
West Brook	Frontenac O	100
West Brook	Cumberland N. S	100
Westbrook Mills	Cumberland N. S	×
West Broughton	Megantic Q	×
Westbury	Compton Q	×
Westbury Basin	Compton Q	×
West Caledonia	Queen's N. S	×
West Cape	Prince P. E. I	100
West Cariboo	Pictou N. S	×
Westchester	Cumberland N. S	×
Westchester Lake	Cumberland N. S	×
West Chezzetcook	Halifax N. S	×
Westcock	Westmoreland N. B	×
West Ditton	Compton Q	×
West Dublin	Lunenburg N. S	×
Western Covehead	Queen's P. E. I	×
Western Head	Queen's N. S	×
Western Road	Prince P. E. I	×
West Assa	Simcoe, S. R. O	×
Westfield	Huron, W. R. O	×
Westfield	King's N. B	×
West Flamboro'	Wentworth, N. R. O	350
Westford	Bruce O	×
West Glassville	Carleton N. B	×
West Gravenhurst	Simcoe, E. R. O	×
West Gore	Hants N. S	×
West Grove	Muskoka & P. S'd O	×
West Hall	Selkirk M	×
West Hansford	Cumberland N. S	×
West Hill	York, E. R. O	150
West Huntley	Lanark, N. R. O	×
West Huntingdon	Hastings, N. R. O	×
West Inglisville	Annapolis N. S	×
West Jeddore	Halifax N. S	×
West La Have Ferry	Lunenburg N. S	×
West Lake	Prince Edward O	×
West Lakevale	Antigonishe N. S	×
West Leicester	Cumberland N. S	×
West Lorne	Elgin, W. R. O	800
West Lynne	Provencher M	×
West McGillivray	Middlesex, N. R. O	×
West Magdala	Elgin, W. R. O	×
Westmeath	Renfrew, N. R. O	150
West Merigonishe	Pictou N. S	×
West Montrose	Waterloo, N. R. O	350
Westmoreland Point	Westmoreland N. B	×
West New Annan	Colchester N. S	×
West Newdy Quoddy	Halifax N. S	×
West Newton	Queen's P. E. I	×
* *Weston*	York, W. R. O	1,000
West Osgoode	Russell O	150
Westover	Wentworth, N. R. O	100
* *Westport*	Leeds, S. R. O	550
Westport	Digby N. S	600
West Point	Prince P. E. I	×
West Potton	Brome Q	200
West Pubnico	Yarmouth N. S	×
West Quaco	St. John N. B	×
West River	Albert N. B	×
West River	Pictou N. S	200
W. River Sheet Har.	Halifax N. S	×
West River Station	Pictou N. S	×
W. Scotch Settlement	King's N. B	×
West Shefford	Shefford Q	800
West Shefford Station	Shefford Q	×
W. Side of Lochaber	Antigonishe N. S	×
W. Side Middle River	Victoria N. S	×
West St. Peter's	King's P. E. I	×
West Toronto Junc.	York, W. R. O	1,000
* *Westville*	Pictou N. S	1,000
* *West Winchester*	Dundas O	800
Westwood	Peterboro', E. R. O	125
Wexford	York, E. R. O	100
Weymouth	Digby N. S	×
Weymouth Bridge	Digby N. S	400
Whalen	Middlesex, N. R. O	150
Wheatland	Marquette M	×
Wheatland	Drummond Q	400
Wheatley	Essex, S. R. O	100
Wheatley River	Queen's P. E. I	200
Wheaton Mills	Westmoreland N. B	×
Wheaton Settlement	Westmoreland N. B	×
Wheeler	Lambton, E. R. O	×
Whim Road Cross	King's P. E. I	×
Whitburn	Pictou N. S	×
* *Whitby*	Ontario, S. R. O	3,500
White	Lanark, N. R. O	×
White Church	Bruce, W. R. O	×
Whitehead	Guysboro' N. S	×
Whitehead	King's N. B	×
White Head	Charlotte N. B	×
White Hill	Pictou N. S	×
Whitehurst	Brockville O	×
White Lake	Renfrew, S. R. O	150
Whitemouth	M	200
White Oak	Middlesex, S. R. O	×
White Point	Victoria N. S	×
White Rock Mills	King's N. S	×
White Rose	Ontario, W. R. O	×
White Sands	King's P. E. I	×
Whiteside	Simcoe, E. R. O	×
White's Cove	Queen's N. B	200
White's Mills	King's N. B	×
White's Point	Queen's N. B	×
Whitestone	Muskoka O	×
Whitevale	Ontario, W. R. O	300
Whitewater	Selkirk M	×
Whitewood Station	Assiniboia Territory	×
Whitfield	Simcoe, S. R. O	×
Whitney	Northumb. N. B	×
Whitter's Ridge	Charlotte N. B	×
Whittington	Wellington, N. R. O	×
Whitwick	Compton Q	×
Whonnock	New Westm'r. B C	×
Whycocomagh	Inverness N. S	400
Whycocom'h B., (NS)	Inverness N. S	×
Whycocomagh, Rear	Inverness N. S	×
* *Wiarton*	Bruce, N. R. O	1,400
Wick	Ontario, N. R. O	×
Wickham, West	Drummond Q	1,000
Wickham	Queen's N. B	250
Wicklow	Northumb., W. R. O	×
Wicklow	Carleton N. B	×
Widder	Lambton, E. R. O	120
Wiggins	Queen's N. B	×
Wilberforce	Peterboro', E. R. O	×
Wilbur	Westmoreland N. B	×
Wilbur Station	Lanark, N. R. O	×
Wilfrid	Ontario, N. R. O	100
Wilkesport	Bothwell O	200
Willetsholme	Frontenac O	100
Williams	Kent O	×
Williamsdale	Cumberland N. S	×
Williamsford	Grey, N. R. O	220
Williamstown	Glengarry O	600
Williamstown	Carleton N. B	×
Williamsville	Kingston O	×
Williscroft	Bruce, N. R. O	×
Willoughby	Saskatchewan Ter.	×
Willow Creek	Bruce, N. R. O	×
Willowdale	York, W. R. O	×
Willowdale	Queen's N. B	×
Willow Grove	St. John N. B	×
Willowgrove	Haldimand O	×
Wilmot	Annapolis N. S	200
Wilmot Valley	Prince P. E. I	×
Wilmur	Addington O	300
Wilno	Renfrew O	×
Wilson Croft	Lambton, E. R. O	×
Wilsonville	Norfolk, N. R. O	×
Wilson's Beach	Charlotte N. B	400
Wilson's Corners	Ottawa Q	×
Wilson's Mills	Megantic Q	×
Wilson's Point	Gloucester N. B	×
Wilstead	Leeds O	×
Wilton	Lennox O	250
Wilton Grove	Middlesex, S. R. O	×
Winchelsea	Huron, S. R. O	×
Winchester Springs	Dundas O	400
Windermere	Muskoka & P. S'd O	×
Windfall	Essex, N. R. O	×
Windham Centre	Norfolk, N. R. O	250
Windham Hill	Cumberland N. S	×
Winding Ledges	Victoria N. B	×
* *Windsor*	Essex, N. R. O	7,500
Windsor	Carleton N. B	×
Windsor	Hants N. S	3,000
Windsor Mills	Richmond Q	1,000
Wine Harbour	Guysboro' N. S	380
Winfield	Wellington, C. R. O	×
Winger	Monck O	100
* *Wingham*	Huron, E. R. O	2,400
Wingle	Renfrew, S. R. O	×
Winlaw	Assiniboia Ter.	×
* *Winnipeg*	Winnipeg M	25,642
Winona	Wentworth, S. R. O	200
Winsloe Road	Queen's P. E. I	×
Winslow	Monck O	×
Winterbourne	Waterloo, N. R. O	150
Winthrop	Huron, S. R. O	×
Winsawasa	Muskoka & P. S'd O	×
Wisbeach	Lambton, E. R. O	×
Wishart	Assa	×

LIST OF POST OFFICES IN CANADA.

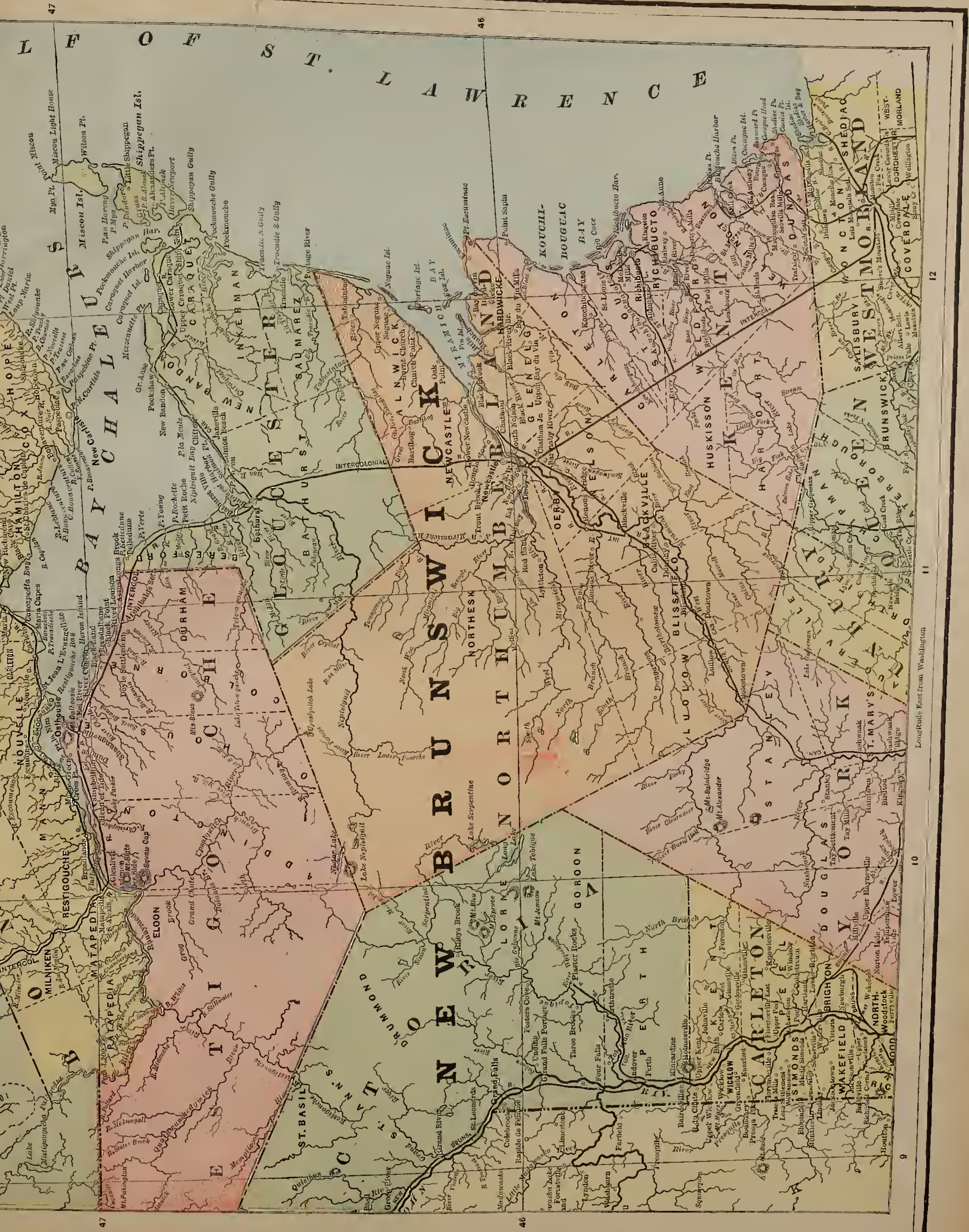
POST OFFICE.	ELECTORAL DISTRICT.	POP.	POST OFFICE.	ELECTORAL DISTRICT.	POP.	POST OFFICE.	ELECTORAL DISTRICT.	POP.	POST OFFICE	ELECTORAL DISTRICT.	POP.
Wittenbury	Colchester........N. S	×	Wood Point	Westmoreland .....N. B	150	Wyandot	Wellington, C. R......O	×	Yoho Island	Muskoka & P. S'd.....O	×
Woburn	York, E. R ....O	×	Woodrous	Prince Edward........O	×	Wyebridge	Simcoe, E. R..........O	250	* *York*	Haldimand ....O	400
Wolf Creek	....................Assa	×	Woodside	Megantic ....Q	500	Wyecombe	Norfolk, S. R..........O	×	York Mills	York, E. R............O	100
Wolfe Island	Frontenac..............O	×	Woodside	Marquette..............M	×	Wyevale	Simcoe, E. R..........O	×	York Mills	York...............N. B	×
Wolfe Ridge	Missisquoi.............Q	×	Woodside	Sunbury...........N. B	×	Wylie	Renfrew, N. R........O	×	Yorkton	....................Assa	×
Wolfstown	Wolfe....................Q	120	* *Woodslee*	Essex, N. R...........O	200	* *Wyoming*	Lambton, W. R........O	900	* *Yorkville*	York, E. R............O	×
Wolfville	King's..............N. S	900	* *Woodstock*	Oxford, N. R.........O	8,612	Wyse's Corner	Halifax............N. S	×	Young's Cove	Queen's...........N. B	×
Wolseley	Grey, N. R.............O	×	*Woodstock*	Carleton..........N. B	3,000	Wyton Station	Middlesex, E. R.......O	×	Young's Point	Peterboro', W. R......O	×
Wolverton	Brant, N. R............O	250	Woodstock R. Station	Carleton..........N. B	×	*Yale*	Yale ....B. C	400	Youngsville	Oxford, N. R..........O	×
Woodbourne	Pictou.............N. S	×	* *Woodville*	Victoria, N. R........O	600	*Yamachiche*	St. Maurice ....Q	1,300	Zanesville	Addington.............O	×
* *Woodbridge*	York, W. R...........O	1,150	Woodville	Hants..............N. S	300	Yamaska	Yamaska ....Q	800	Zealand	Addington.............O	×
Woodburn	Wentworth, S. R......O	×	Woodville	Victoria..........N. B	×	Yarker	Addington.............O	500	Zealand Station	York...............N. B	×
Woodford	Grey, N. R.............O	×	Woodward's Cove	Charlotte ....N. B	×	Yarm	Pontiac.................Q	×	Zephyr	Ontario, N. R.........O	200
Woodham	Perth, S. R............O	100	Wooler	Northumberl'd, E. R..O	400	*Yarmouth*	Yarmouth ....N. S	5,500	Zimmerman	Halton..................O	100
Woodhill	Peel ....O	×	Woonona	Lisgar...................M	×	Yarmouth Centre	Elgin, E. R............O	150	Zion	Durham, E. R.........O	×
Woodlands	Stormont.................O	×	Workman	....................Assa	×	Yatton	Wellington, C. R......O	×	Ziska	Simcoe, E. R..........O	×
Woodlands	Lisgar ....M	×	Wotton	Wolfe.....................Q	550	Yearley's	Muskoka & P S'd......O	×	*Zurich*	Huron, S. R...........O	700
Wood Island	Queen's..........P. E. I	×	Wreck Cove	Victoria ....N... S	×	Yelverton	Durham, E. R.........O	×			
Woodlawn	Carleton.................O	×	*Wrigh*	Ottawa ....Q	1,000	Yeovil	Grey, S. R.............O	×			
Woodnorth	Selkirk ....M	×	* *Wroxeter*	Huron, E. R...........O	500	Yoho	York...............N. B	×			



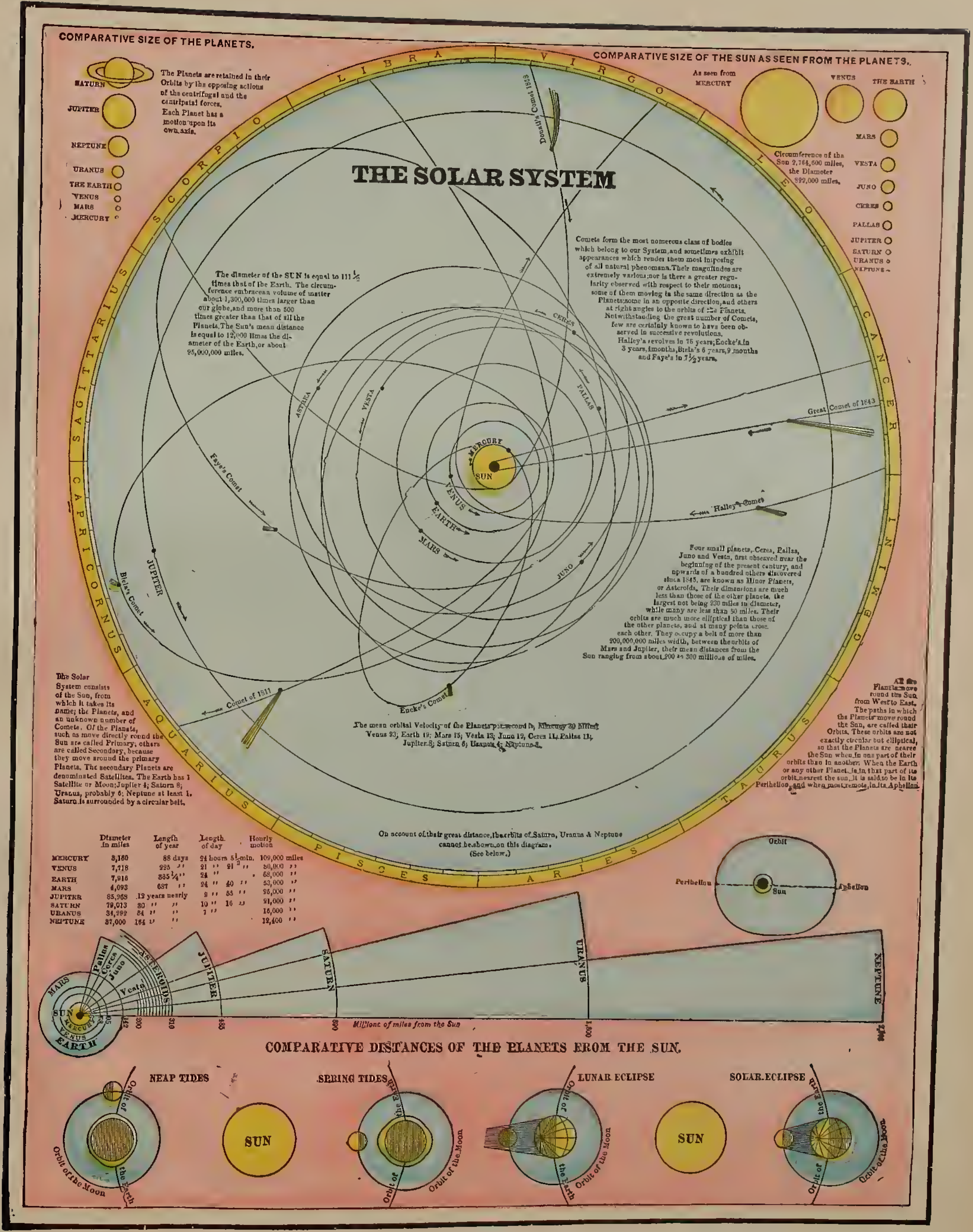
EASTERN PART OF QUEBEC

Geo. F. Cram, Engraver, Chicago, Ill.

SCALE OF MILES
0 2 4 6 8 10 15 20 30 40
Longitude West 67 66 from Greenwich 65 64
49
48
GULF OF ST. LAWRENCE
ANTICOSTI
GASPE
BONAVENTURE
RIMOUSKI
QUEBEC
SAGUENAY
MOISIC
LETELLIER
ARNAUD
LE NEUF
DE MONTS
THE SEVEN ISLANDS
Moisie Bay
Cape St. Nicolas
Godbout
West Point
North Point
High Cliff Pt.
Cape Gaspe
Gaspe Basin
Perce
Port Daniel
Cascapedia Bay
Matane
Cap Chat
Mont Louis
Cap des Rosiers
Cape Chatte
Point St. Peter
Bonaventure Id.
Newport
Pabos
Little Pabos
Malbaie
Douglastown
St. Anne des Monts


GULF OF ST. LAWRENCE
BAY CHALEUR
NEW BRUNSWICK
RESTIGOUCHE
GLOUCESTER
NORTHUMBERLAND
KENT
WESTMORLAND
YORK
CARLETON
BONAVENTURE
MATAPEDIA
DURHAM
ELDON
ADDINGTON
COLBORNE
DALHOUSIE
BATHURST
NEW BANDON
INKERMAN
SAUMAREZ
CARAQUET
SHIPPEGAN
ALNWICK
NEWCASTLE
NORTHESK
HARDWICKE
GLENELG
NELSON
DERBY
BLACKVILLE
BLISSFIELD
LUDLOW
STANLEY
DOUGLAS
ST. MARY'S
KINGSCLEAR
BRIGHTON
WAKEFIELD
WOODSTOCK
WICKLOW
SIMONDS
KENT
PERTH
GORDON
LORNE
DRUMMOND
ST. ANN'S
ST. BASIL
WELLINGTON
RICHIBUCTO
WELDFORD
HARCOURT
HUSKISSON
CARLETON
ST. LOUIS
DUNDAS
MONCTON
SHEDIAC
SALISBURY
DORCHESTER
WESTMORLAND
COVERDALE
BRUNSWICK
BLACKVILLE
Miscou Isl.
Shippegan Isl.
Miramichi Bay
Kouchibouguac Bay
Lake Nepisiguit
Lake Serpentine
Grand Falls
Campbellton
Dalhousie
Bathurst
Chatham
Newcastle
Richibucto
Shediac
Moncton
Dorchester
Woodstock
Intercolonial
Longitude East from Washington
47
46
9
10
11
12

XLVII



THE SOLAR SYSTEM

COMPARATIVE SIZE OF THE PLANETS.

The Planets are retained in their Orbits by the opposing actions of the centrifugal and the centripetal forces. Each Planet has a motion upon its own axis.

COMPARATIVE SIZE OF THE SUN AS SEEN FROM THE PLANETS.

Circumference of the Sun 2,764,600 miles, the Diameter 882,000 miles.

The diameter of the SUN is equal to 111 ½ times that of the Earth. The circumference embracean volume of matter about 1,300,000 times larger than our globe, and more than 500 times greater than that of all the Planets. The Sun's mean distance is equal to 12,000 times the diameter of the Earth, or about 95,000,000 miles.

Comets form the most numerous class of bodies which belong to our System, and sometimes exhibit appearances which render them most imposing of all natural phenomena. Their magnitudes are extremely various; nor is there a greater regularity observed with respect to their motions; some of them moving in the same direction as the Planets; some in an opposite direction, and others at right angles to the orbits of the Planets. Notwithstanding the great number of Comets, few are certainly known to have been observed in successive revolutions. Halley's revolves in 76 years; Encke's in 3 years, 4 months, Biela's 6 years, 9 months and Faye's in 7½ years.

Four small planets, Ceres, Pallas, Juno and Vesta, first observed near the beginning of the present century, and upwards of a hundred others discovered since 1845, are known as Minor Planets, or Asteroids. Their dimensions are much less than those of the other planets, the largest not being 230 miles in diameter, while many are less than 50 miles. Their orbits are much more elliptical than those of the other planets, and at many points cross each other. They occupy a belt of more than 200,000,000 miles width, between the orbits of Mars and Jupiter, their mean distances from the Sun ranging from about 200 to 300 millions of miles.

The mean orbital Velocity of the Planets per second is, Mercury 30 Miles; Venus 23; Earth 19; Mars 15; Vesta 13; Juno 12, Ceres 11, Pallas 11; Jupiter 8; Saturn 6; Uranus 4; Neptune 3.

The Solar System consists of the Sun, from which it takes its name; the Planets, and an unknown number of Comets. Of the Planets, such as move directly round the Sun are called Primary; others are called Secondary, because they move around the primary Planets. The secondary Planets are denominated Satellites. The Earth has 1 Satellite or Moon; Jupiter 4; Saturn 8; Uranus, probably 6; Neptune at least 1. Saturn is surrounded by a circular belt.

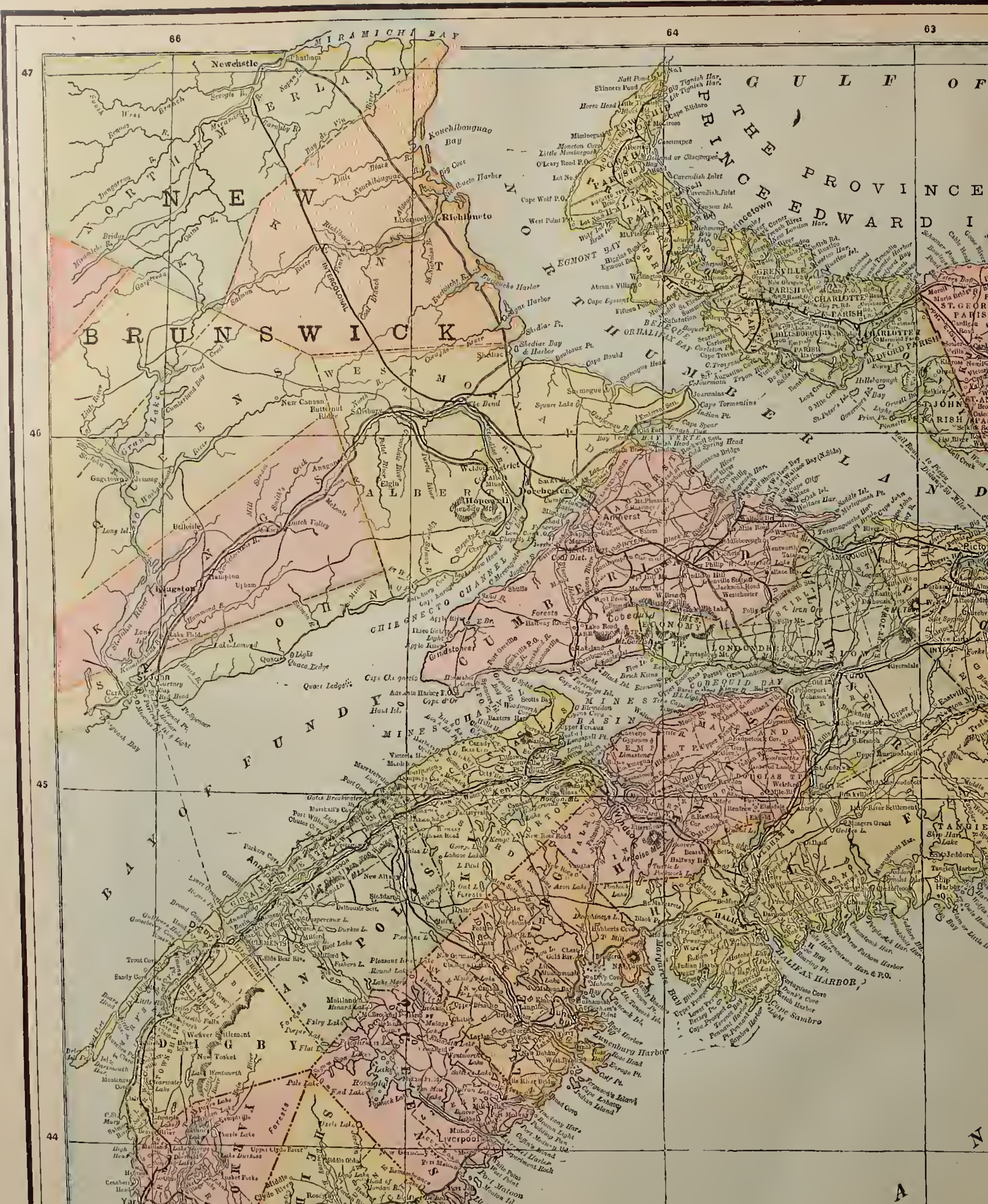
All the Planets move round the Sun from West to East. The paths in which the Planets move round the Sun, are called their Orbits. These orbits are not exactly circular but elliptical, so that the Planets are nearer the Sun when in one part of their orbits than in another. When the Earth or any other Planet is in that part of its orbit nearest the sun, it is said to be in its Perihelion, and when most remote, in its Aphelion.

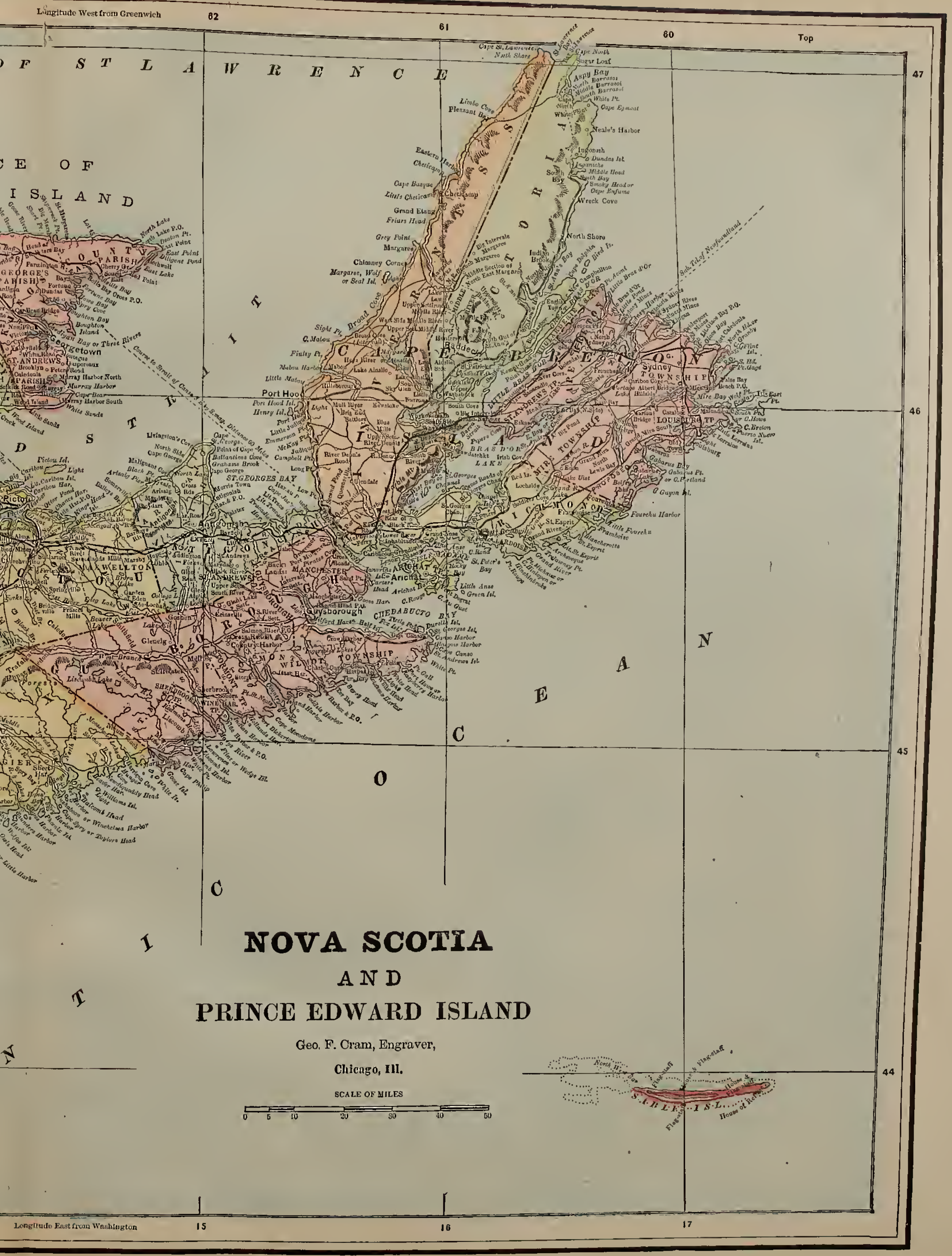
On account of their great distance, the orbits of Saturn, Uranus & Neptune cannot be shown on this diagram. (See below.)

	Diameter in miles	Length of year	Length of day	Hourly motion
MERCURY	3,160	88 days	24 hours 5½ min.	109,000 miles
VENUS	7,718	225 "	21 " 21 "	80,000 "
EARTH	7,916	365 ¼ "	24 "	68,000 "
MARS	4,093	687 "	24 " 40 "	53,000 "
JUPITER	85,968	12 years nearly	9 " 55 "	25,000 "
SATURN	79,013	30 " "	10 " 16 "	21,000 "
URANUS	34,292	84 " "	7 "	16,000 "
NEPTUNE	37,000	164 " "		12,400 "

COMPARATIVE DISTANCES OF THE PLANETS FROM THE SUN.

SATURN
JUPITER
NEPTUNE
URANUS
THE EARTH
VENUS
MARS
MERCURY
As seen from MERCURY
VENUS
THE EARTH
MARS
VESTA
JUNO
CERES
PALLAS
JUPITER
SATURN
URANUS
NEPTUNE
LIBRA
VIRGO
LEO
CANCER
GEMINI
TAURUS
ARIES
PISCES
AQUARIUS
CAPRICORNUS
SAGITTARIUS
SCORPIO
Donati's Comet 1858
CERES
PALLAS
ASTREA
VESTA
MERCURY
SUN
VENUS
EARTH
MARS
JUNO
JUPITER
Great Comet of 1843
Halley's Comet
Faye's Comet
Biela's Comet
Comet of 1811
Encke's Comet
Orbit
Perihelion
Sun
Aphelion
SUN
MERCURY
VENUS
EARTH
MARS
Pallas
Ceres
Juno
Vesta
ASTEROIDS
JUPITER
SATURN
URANUS
NEPTUNE
95
142
200
310
485
890
1,800
Millions of miles from the Sun
NEAP TIDES
SPRING TIDES
LUNAR ECLIPSE
SOLAR ECLIPSE
Orbit of the Earth
Orbit of the Moon
SUN


66
64
63
47
46
45
44
11
12
13
14
MIRAMICHI BAY
NORTHUMBERLAND
NEW BRUNSWICK
KENT
WESTMORLAND
ALBERT
KINGS
QUEENS
ST. JOHN
Newcastle
Chatham
Kouchibouguac Bay
Richibucto
Shediac
Moncton
Dorchester
Sackville
Hopewell
Hampton
St. John
Gagetown
GULF OF
THE PROVINCE OF PRINCE EDWARD I
EGMONT BAY
Princetown
Charlottetown
CHARLOTTE
NORTHUMBERLAND STRAIT
Cape Tormentine
BAY VERTE
CUMBERLAND
Amherst
Pictou
COLCHESTER
Truro
COBEQUID BAY
CHIGNECTO CHANNEL
MINES CHANNEL
MINES BASIN
Cape d'Or
Cape Chignecto
BAY OF FUNDY
KINGS
Kentville
Windsor
HANTS
ANNAPOLIS
Annapolis
DIGBY
Digby
LUNENBURG
Lunenburg
Lunenburg Harbor
QUEENS
Liverpool
SHELBURNE
Shelburne
YARMOUTH
Yarmouth
Cape Sable
Barrington
HALIFAX
Halifax
HALIFAX HARBOR
Cape Sambro
Tangier
Jeddore
ATLANTIC



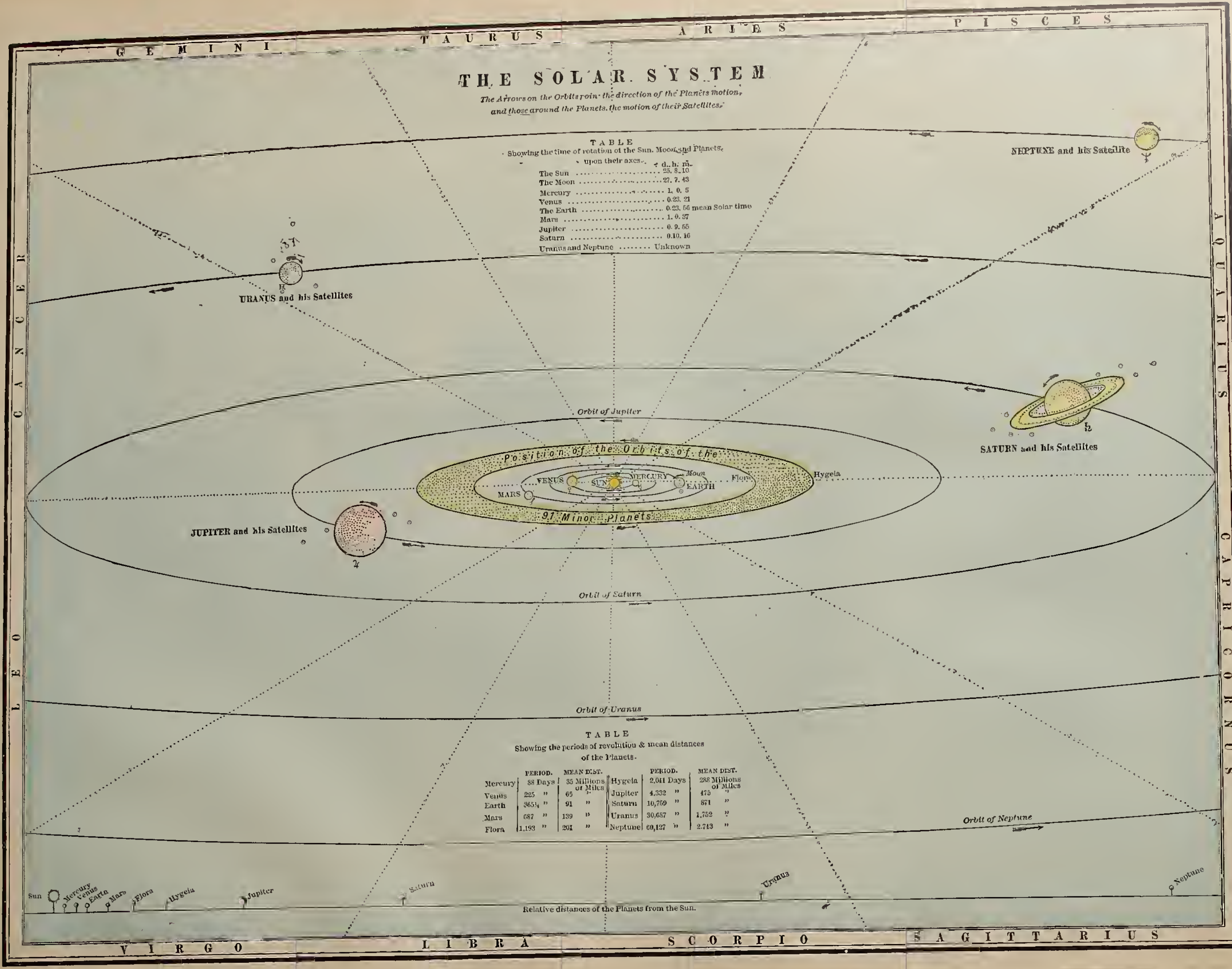
NOVA SCOTIA
AND
PRINCE EDWARD ISLAND

Geo. F. Cram, Engraver,
Chicago, Ill.

Longitude West from Greenwich
62
61
60
Top
47
46
45
44
Longitude East from Washington
15
16
17
SCALE OF MILES
0
5
10
20
30
40
50
ST LAWRENCE
OCEAN
Cape North
Sugar Loaf
Aspy Bay
Neale's Harbor
Ingonish
Cape Smoky
Wreck Cove
North Shore
Cheticamp
Margaree
Port Hood
St. George's Bay
Antigonish
Baddeck
Bras d'Or Lake
Sydney
Louisburg
St. Peter's Bay
Arichat
Guysborough
Chedabucto Bay
Canso
Sherbrooke
Pictou Isl.
Georgetown
Murray Harbor
Fourchu Harbor
Gabarus Bay
Scatarie Isl.
Sable Isl.
North Bar
House of Refuge
Flag-staff
Course to Strait of Canso
Sub. Tel. of Newfoundland

THE SOLAR SYSTEM

The Arrows on the Orbits point the direction of the Planets motion, and those around the Planets, the motion of their Satellites.


GEMINI
TAURUS
ARIES
PISCES
AQUARIUS
CAPRICORNUS
SAGITTARIUS
SCORPIO
LIBRA
VIRGO
LEO
CANCER
NEPTUNE and his Satellite
URANUS and his Satellites
SATURN and his Satellites
JUPITER and his Satellites
Orbit of Jupiter
Position of the Orbits of the 91 Minor Planets
VENUS
SUN
MERCURY
Moon
EARTH
MARS
Flora
Hygeia
Orbit of Saturn
Orbit of Uranus
Orbit of Neptune
Sun
Mercury
Venus
Earth
Mars
Flora
Hygeia
Jupiter
Saturn
Uranus
Neptune
Relative distances of the Planets from the Sun.

TABLE

Showing the time of rotation of the Sun, Moon and Planets upon their axes.

	d. h. m.
The Sun	25. 8. 10
The Moon	27. 7. 43
Mercury	1. 0. 5
Venus	0. 23. 21
The Earth	0. 23. 56 mean Solar time
Mars	1. 0. 37
Jupiter	0. 9. 55
Saturn	0. 10. 16
Uranus and Neptune	Unknown

TABLE

Showing the periods of revolution & mean distances of the Planets.

	PERIOD.	MEAN DIST.		PERIOD.	MEAN DIST.
Mercury	88 Days	35 Millions of Miles	Hygeia	2,041 Days	288 Millions of Miles
Venus	225 "	65 "	Jupiter	4,332 "	475 "
Earth	365¼ "	91 "	Saturn	10,759 "	871 "
Mars	687 "	139 "	Uranus	30,687 "	1,752 "
Flora	1,193 "	201 "	Neptune	60,127 "	2,743 "

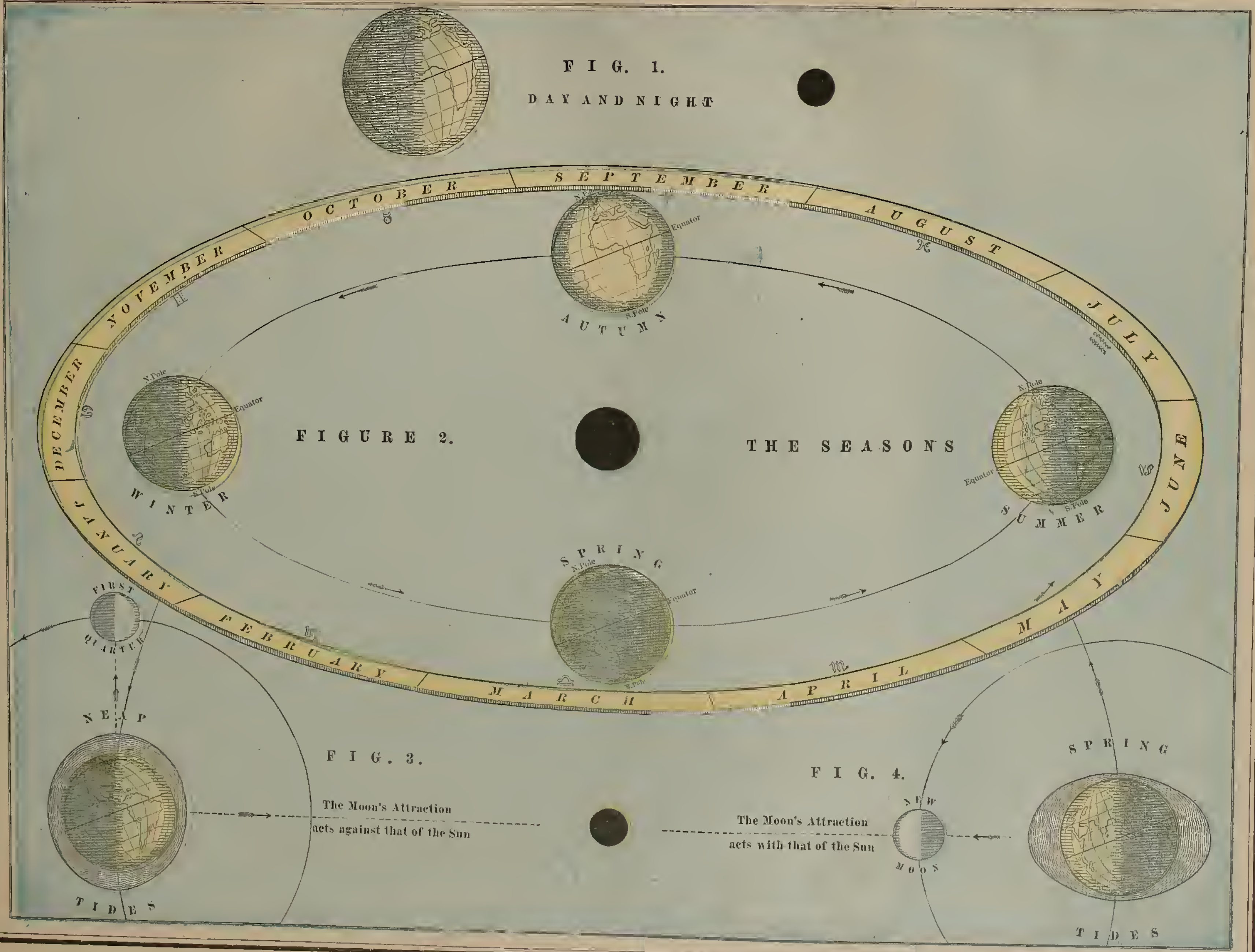
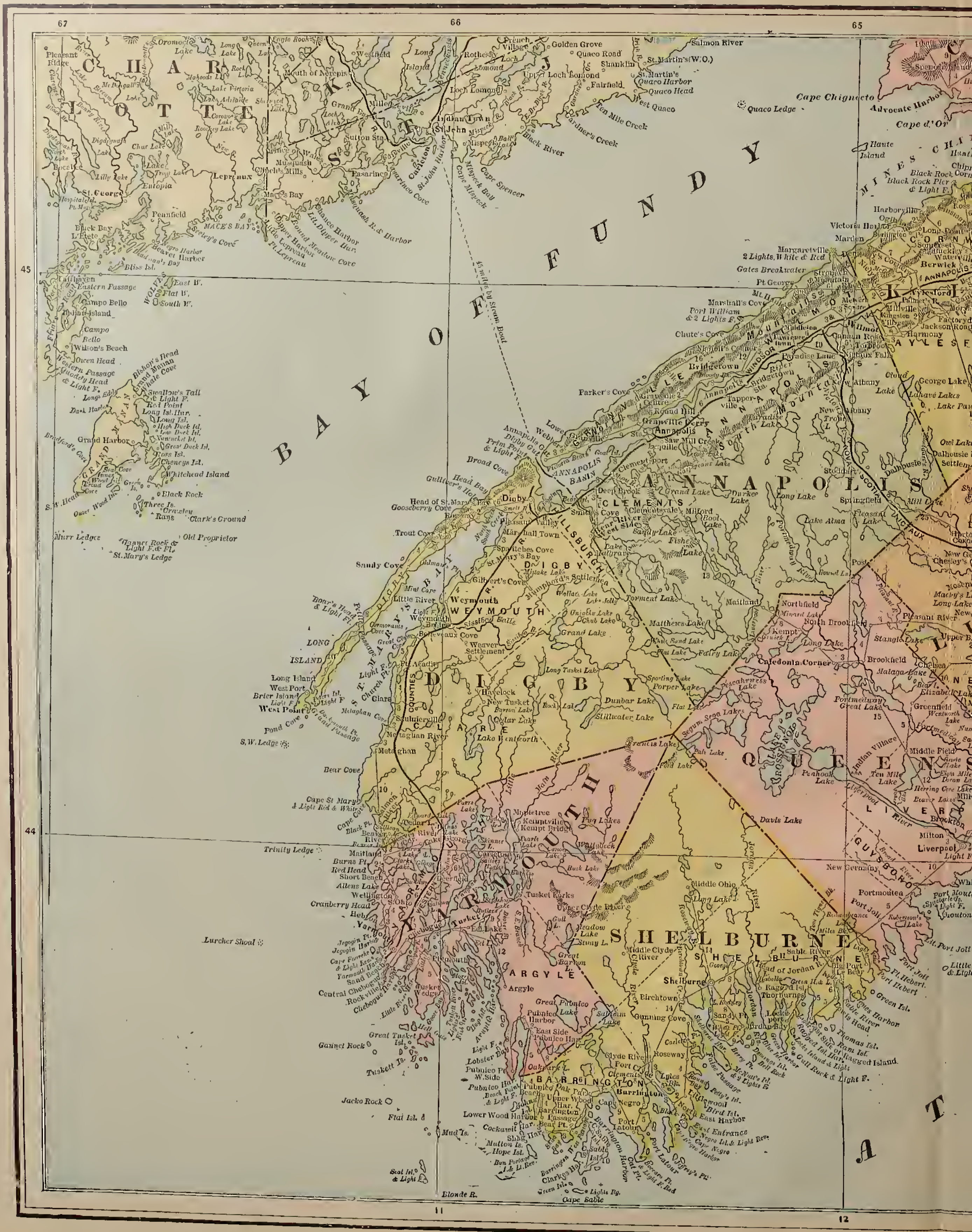
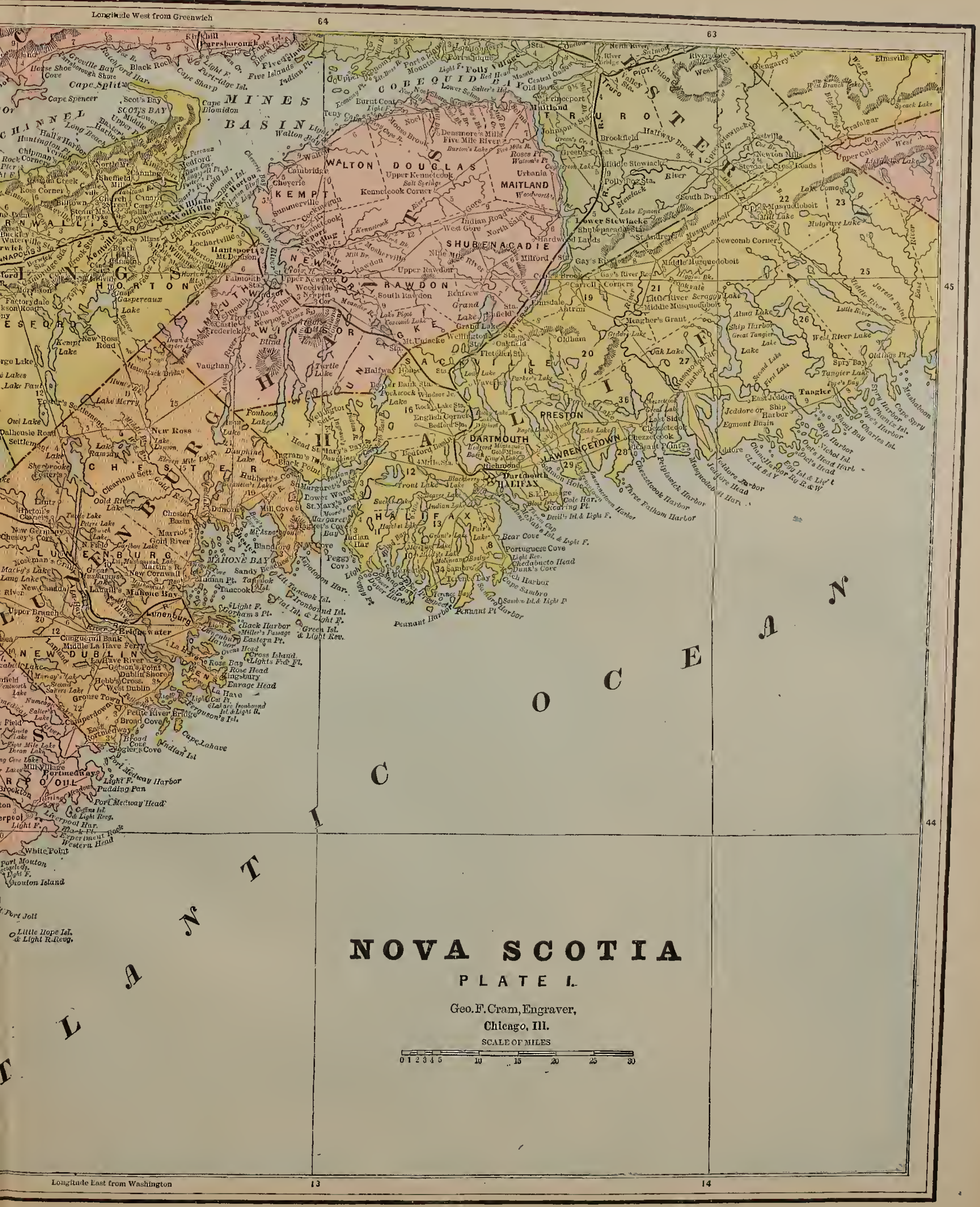


FIG. 1.
DAY AND NIGHT
FIGURE 2.
THE SEASONS
SEPTEMBER
AUGUST
JULY
JUNE
MAY
APRIL
MARCH
FEBRUARY
JANUARY
DECEMBER
NOVEMBER
OCTOBER
AUTUMN
WINTER
SPRING
SUMMER
N.Pole
S.Pole
Equator
FIG. 3.
The Moon's Attraction
acts against that of the Sun
FIRST QUARTER
NEAP
TIDES
FIG. 4.
The Moon's Attraction
acts with that of the Sun
NEW MOON
SPRING
TIDES


67
66
65
45
44
11
12
BAY OF FUNDY
CHARLOTTE
KINGS
ST. JOHN
Pleasant Ridge
Oromocto Lake
Long Lake
Queen Lake
Lake Victoria
Lake Adelaide
Mouth of Nerepis
Westfield
Rothesay
French Village
Loch Lomond
Golden Grove
Quaco Road
Shanklin
Salmon River
St. Martin's (W.O.)
St. Martin's
Quaco Harbor
Quaco Head
Fairfield
West Quaco
Ten Mile Creek
Gardner's Creek
Quaco Ledge
Cape Chignecto
Advocate Harbor
Cape d'Or
Indian Town
St. John
Carleton
Mispec
Black River
Cape Spencer
Mispeck Bay
Cape Mispeck
St. John Harbor
Lepreaux
Musquash
Pisarinco
Chittick's Mills
Mace's Bay
Dipper Harbor
Point Lepreau
Lepreau
Musquash R. & Harbor
St. George
Pennfield
Utopia
Lilly Lake
Digdeguash
Chur Lake
Black Bay
L'Etete
Seeley's Cove
Beaver Harbor
Bliss Isl.
Campobello
Eastern Passage
Campo Bello
Indian Island
Wilson's Beach
Owen Head
Western Passage
Quoddy Head
Bishop's Head
Grand Manan
Swallow's Tail & Light F.
Red Point
Long Isl. Hbr.
Long Isl.
High Duck Isl.
Low Duck Isl.
Great Duck Isl.
Ross Isl.
Cheneys Isl.
Whitehead Island
Grand Harbor
Dark Harbor
Bradford's Cove
Seal Cove
S.W. Head
Black Rock
Three Is.
Crawley Rans
Clark's Ground
Murr Ledge
Gannet Rock & Light F. & Fl.
Old Proprietor
St. Mary's Ledge
East W.
Flat W.
South W.
Wolves
45 miles by Steam Boat
Haute Island
Harborville
Victoria Harbor
Marden
Margaretville 2 Lights, White & Red
Gates Breakwater
Pt. George
Marshall's Cove
Port William & 2 Lights F.
Clute's Cove
Berwick
Aylesford
Kingston
Wilmot
Harmony
Factorydale
Jackson Road
Bridgetown
Paradise Lane
Tupperville
Round Hill
Granville Ferry
Annapolis
Parker's Cove
Lequille
Saw Mill Creek
Paradise Lake
New Albany
Albany
New Tropic L.
George Lake
Lahave Lakes
Owl Lake
Dalhousie
Springfield
Mill Lake
Pleasant Lake
Lake Alma
Long Lake
Durkee Lake
Milford
Clementsvale
Clementsport
Deep Brook
Bear River
Annapolis Basin
Digby Gut
Prim Point & Light F.
Broad Cove
Head Bay
Gulliver's Hole
Head of St. Mary's Bay
Gooseberry Cove
Digby
Trout Cove
Sandy Cove
Smith's Cove
Pleasant Valley
Marshall Town
Spurtches Cove
St. Mary's Bay
Gilbert's Cove
Little River
Weymouth
Weymouth Bridge
Sissiboo Falls
Weaver Settlement
Belleveaux Cove
Grand Lake
Long Tusket Lake
Havelock
New Tusket
Dunbar Lake
Stillwater Lake
Porper Lake
Sporting Lake
Fairy Lake
Maitland
Northfield
North Brookfield
Kempt
Brookfield
Caledonia Corner
Pleasant River
Lake Rossignol
Segum Segu Lakes
Francis Lake
Peskahrawes Lake
Peskahook Lake
Ten Mile Lake
Indian Village
Middle Field
Greenfield
Portmedway Great Lake
Herring Cove Lake
Brookton
Milton
Liverpool
New Germany
Portmouton
Port Joli
Port Hebert
Little Hope Isl. & Light
Green Isl.
Sable River
Jones Harbor
Ragged Isl. Harbor
Ragged Island
Thomas Isl.
Shelburne
Birchtown
Gunning Cove
Roseway
Sandy Pt.
Lockeport
Jordan Bay
Jordan R.
Davis Lake
Middle Ohio
Middle Clyde River
Clyde River
Barrington
Port Clements
Port Latour
Cape Negro
Baccaro Pt.
Cape Sable
Cape Sable Island
Clark's Harbor
Barrington Passage
Shag Harbor
Lower Wood Harbor
Pubnico
East Side Pubnico Har.
Great Pubnico Lake
Argyle
Tusket
Tusket Forks
Tusket Is.
Great Tusket Isl.
Gannet Rock
Jacko Rock
Flat Isl.
Mud Is.
Seal Isl. & Light
Blonde R.
Mutton Is.
Hope Isl.
Cockawit Har.
Lobster Bay
Central Chebogue
Chebogue
Rockville
Yarmouth
Jegogin Pt.
Cape Forchu & Light Rev.
Cranberry Head
Wellington
Allens Lake
Short Beach
Red Head
Burns Pt.
Maitland
Trinity Ledge
Lurcher Shoal
Beaver River
Cape St. Mary & Light Red & White
Cape Cove
Black Pt.
Bear Cove
Meteghan
Meteghan River
Salmon River
Clare
Church Pt.
Pt. Acadie
Long Island
Long Island
West Port
Brier Island Light F.
West Point
Pond Cove
S.W. Ledge
Grand Passage
Boar's Head & Light F.
Petit Passage
Cormorants Cove
Great Cove
Kemptville
Kempt Bridge
Myrtle Tree
Fog Lakes
Busk Lake
Gull L.
Meadow Lake
Stony L.
Great Barren L.
Digby
Clements
Hillsburg
Weymouth
Clare
Argyle
Barrington
Shelburne
Queens
Liverpool
Annapolis
Yarmouth
Digby
Shelburne
Guysboro
Mines Channel
North Mountain
South Mountain
Annapolis River
Nova Scotia Railway
Western Counties
Atlantic


Longitude West from Greenwich
64
63
45
44
Longitude East from Washington
13
14
MINES BASIN
COBEQUID BAY
CHANNEL
Cape Split
Cape Blomidon
Scot's Bay
Parrsborough
Five Islands
Truro
Maitland
TRURO
COLCHESTER
PICTOU
Elmsville
Upper Caledonia
Brookfield
Middle Stewiacke
Lower Stewiacke
Shubenacadie
SHUBENACADIE
WALTON
DOUGLAS
MAITLAND
KEMPT
Kennetcook
NEWPORT
RAWDON
Windsor
WINDSOR
Hantsport
Wolfville
Kentville
Canning
CORNWALLIS
HORTON
Falmouth
Gaspereaux
Kempt Lake
New Ross
CHESTER
Chester
Chester Basin
Mahone Bay
MAHONE BAY
Lunenburg
LUNENBURG
Bridgewater
NEW DUBLIN
La Have River
Cape Lahave
Port Medway
Port Medway Head
Liverpool
Port Mouton
Mouton Island
Port Joli
Little Hope Isl. & Light R. Revg.
Hubbert's Cove
Margaret's Bay
Peggy's Cove
Indian Har.
Prospect
Sambro
Cape Sambro
Pennant Pt
Chebucto Head
Portuguese Cove
Bear Cove
HALIFAX
Halifax
Dartmouth
DARTMOUTH
Bedford Basin
PRESTON
LAWRENCETOWN
Cole Har.
Devil's Isl. & Light F.
Lawrencetown Harbor
Three Fathom Harbor
Chezzetcook Harbor
Petpiswick Harbor
Musquodoboit Har.
Jeddore Harbor
Jeddore Head
Jeddore or Ship Harbor
Ship Harbor
Owl's Head
Clam Bay
Tangier
Spry Bay
Cape Spry
Mushaboom
Upper Musquodoboit
Middle Musquodoboit
Musquodoboit
Newcomb Corner
Oldham
Waverley
Wellington
Enfield
Grand Lake
Elmsdale
Mt. Uniacke
SACKVILLE
Halfway House
Hammond's Plains
Trafalgar
Lake Como
Mulgrave Lake
West River Lake
Tangier Lake
Scraggy Lake
Lake Egmont
HANTS
HALIFAX
ATLANTIC OCEAN
SCALE OF MILES
0 1 2 3 4 5 10 15 20 25 30

NOVA SCOTIA

PLATE I.

Geo. F. Cram, Engraver,
Chicago, Ill.

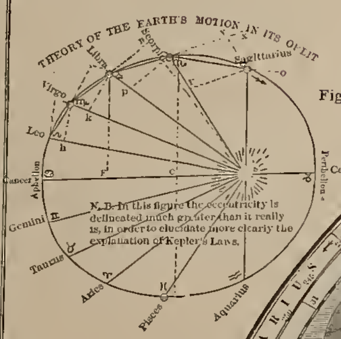
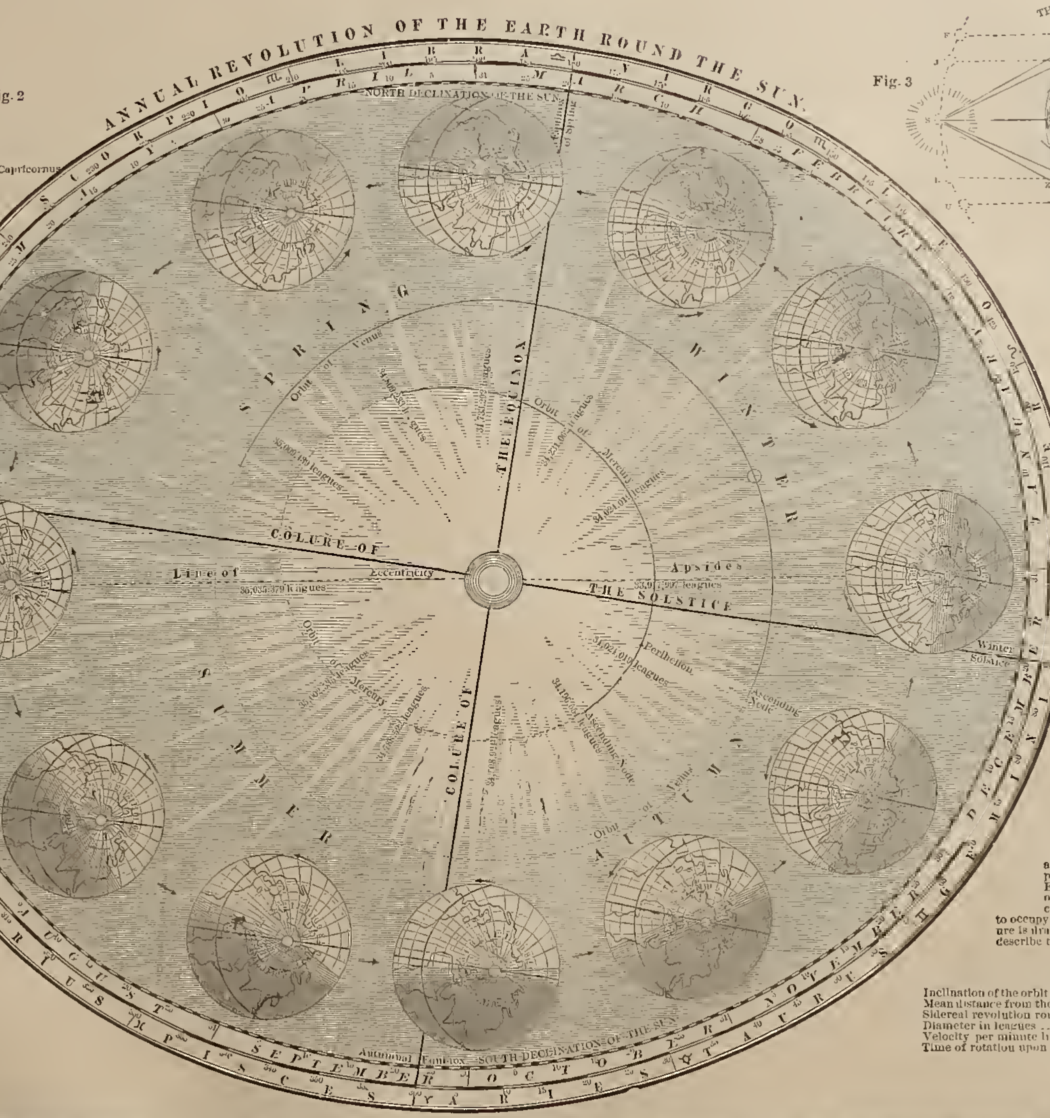

THEORY OF THE EARTH'S MOTION IN ITS ORBIT
Libra
Scorpio
Sagittarius
Virgo
Leo
Cancer
Aphelion
Gemini
Taurus
Aries
Pisces
Aquarius
Capricornus
Perihelion
p
k
h
F
C
x
o
r

Fig. 2

N. B. In this figure the eccentricity is delineated much greater than it really is, in order to elucidate more clearly the explanation of Kepler's Laws.

ANNUAL REVOLUTION OF THE EARTH ROUND THE SUN.


NORTH DECLINATION OF THE SUN
SOUTH DECLINATION OF THE SUN
SPRING
SUMMER
AUTUMN
WINTER
COLURE OF THE EQUINOX
COLURE OF THE SOLSTICE
Line of Eccentricity
Apsides
Perihelion
Ascending Node
Orbit of Venus
Orbit of Mercury
Summer Solstice
Winter Solstice
Autumnal Equinox
CAPRICORNUS
SAGITTARIUS
SCORPIO
LIBRA
VIRGO
LEO
CANCER
GEMINI
TAURUS
ARIES
PISCES
AQUARIUS
JANUARY
FEBRUARY
MARCH
APRIL
MAY
JUNE
JULY
AUGUST
SEPTEMBER
OCTOBER
NOVEMBER
DECEMBER

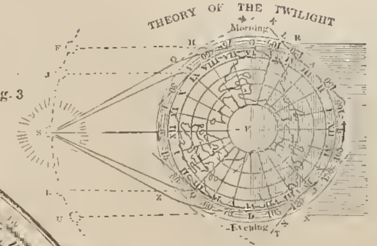

THEORY OF THE TWILIGHT
Morning
Evening
F
H
J
S
L
U
Z
R
P
D
T
X

Fig. 3

Apparent position of the Sun at different hours of the day, at the time of the Equinoxes.

Fig. 1.

The Centre Figure represents the Annual Revolution of the Earth around the Sun on its Orbit, which is an Ellipse, the eccentricity of which is about 583,691 leagues, and on the first of each Month. The graduated Circle which at a small distance surrounds the North Pole in each figure of the Earth, shows the Parallel of Great Britain; this Circle is divided into 24 hours.

The figure to the right marks the hour of Sun-rise, that to the left the hour of Sun-set. The point o indicates the position of Great Britain with reference to the Sun at the various hours of the Day and Night; for example, it is 2 o'clock A. M. on the first of June, and the horary Circle shows us that at this time the hour of Sunrise is 4h 8m, and that of Sun-set 7h 51m; the night therefore will continue 2h 8m longer. Again on the first of December the Sun rises at 7h 40m, and sets as the horary Circle indicates at 4h 4m, the time supposed being 1h 40m, the day will continue 2h 24m longer.

At this period of the Year the Earth approaches the Winter Solstice when its North Pole is enveloped in darkness for two Months will have reached the middle of its long Night.

Fig. 2.

Suppose a moving body ♏ subjected to the influence of two forces. One in the direction ♏S, the other in the direction ♏x, the intensity being indicated by the right lines ♏P and ♏♎ the moving body can neither go towards S. nor x. but must take an intermediate Course ♏-O. with a Velocity represented by ♏→ It is thus clear that the moving body ♏ will take the same direction and have the same Velocity as One force represented in Magnitude by ♏→ and in direction by ♏O. would have imparted to it. The name Resultant or equivalent force is given to this. When a Curve is described by Virtue of a force directed to a fixed point S. it may be resolved into two—One in the direction of the Radius ♏S, the other of the Curve ♏. This accelerating force is supposed to act only at the beginning of each moment while the Motion is uniform the Vector Radius ♏S. then will trace a small triangle ♍S♎ If this force ceased to act the following moments the Vector Radius would trace a fresh triangle equal to the first. But at the beginning of the next moment the accelerating force ♍k. combines with ♍B. and causes the moving body to exhibit the effects of the resultant force ♎♍ the sides of which ♎P. ♎B represent these forces.

Fig 3.

For some time after sunset the rays still illumine the Atmosphere diffusing themselves through space, and Night come on almost insensibly, this is called twilight and the dawn is a similar Phenomenon which precedes Sun rise. The Solar Ray S. O. which enters the Atmosphere at O instead of coming out at M. will be turned aside refracted or bent more and more as it penetrates the various Strata of Air and will at last reach the Earth describing the Curve O. G. The observer at G. would thus see the Sun much longer at E than really was visible above the horizon. The effect of the dawn is the reverse of this—let the Earth be represented by A.B.C.D. and G. where the Sun rises the horizon at H.G R. receives light from all parts of the Heavens either directly or by reflection, the point A. at which the Sun has not actually rizen, has above its horizon the lenticular portion of the Atmosphere K.L.R. indirectly illuminated the dawn is most brilliant at K. the tint becoming more feeble until it reaches R. its utmost limit above the horizon at B. it is Midnight, and at D. where the Sun is Rising the whole of the horizon is illuminated while at C. the lenticular portions of the Heavens T.N.X. only receive light. The extent of twilight is shown on the figure by a Zone of lighter shade than that which marks Night. Suppose M. the Meridian of London and it is noon at G. (90° West Long.) it is 6 A. M. and at Y. (45° West Long.) 9 o'Clock by the effect of Atmospheric attraction the Sun would appear to be at J. at Q. (45° East Long.) the Sun would appear at E. at 3 o'Clock P. M. Thus as the Earth, the North Pole being at P. turns on its Axis from West to East, as indicated by the Arrows, the Sun will appear to occupy the opposite points F.J.S.E.U. This figure is drawn at the time when the Sun appears to describe the Equator.

	MERCURY.	VENUS.
Inclination of the orbit to the Ecliptic	70	........3° 23
Mean distance from the Sun in leagues	..13.361.000	..24,966.000
Sidereal revolution round the Sun..	..87 days 97	.224 days 70
Diameter in leagues	.... 1.139	2,787
Velocity per minute in leagues.....	653	485
Time of rotation upon its axis......	......24h 4m	.....23h 21m

PHASES AND MOVEMENTS OF THE MOON

TIME OF THE MOON'S REVOLUTIONS

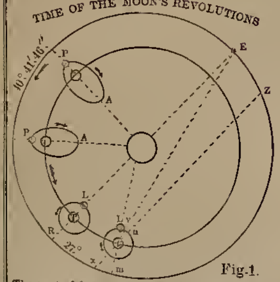
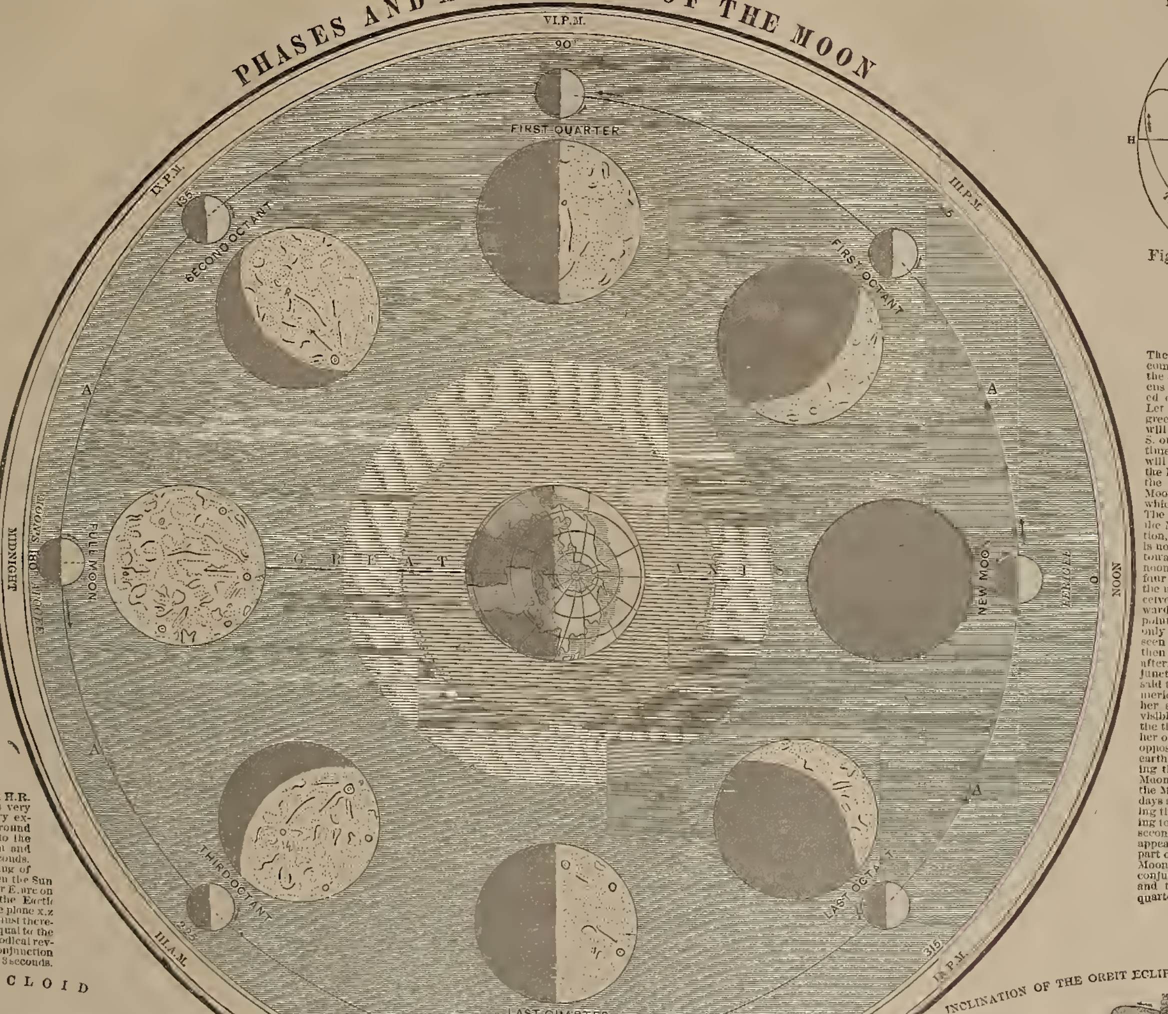


Fig.1.

The central figure represents the Moons phases around the Earth placed in the centre the elliptical line A.A.A.A. indicates the path of the Moon revolving from west to east, at eight points in her orbit. The Moon is shown of her exact relative size to the earth, her distance is however about ten times greater in proportion within the lunar orbit the Moon's phases are represented on an enlarged disk in order to shew the principal spots. The Moon is the satellite of the Earth, that is whilst the Earth performs its annual revolution round the Sun, the Moon accompanies the Earth, revolving also around it. The Moon's orbit is an ellipse the Earth occupying one of the foci-its excentricity is about 1730 Leagues, the mean distance being about 86000 leagues. From the figure of her orbit the Moon is sometimes nearer than at others: the point at which she is nearest is called Perigee (fig.1.P.) that at which she is furthest Apogee (fig.1.A.) The Perigee and Apogee advance every year about 40° 41′ 16″ from west to east. The plane of the lunar orbit makes an angle of 5°8′49″ with the ecliptic (fig. 4). The planes of the two orbits are cut by a line passing through the centre of the Earth, the two points where this line meets the Moon's orbits are the Nodes, one the ascending node, when the Moon rises above the ecliptic towards the north, the other, the descending node, when she sinks below it towards the south: (see fig. 5). The nodes advance every year about 19°20′29″ in an opposite direction to her orbicular motion, Let the Moon (L. fig. 6) be at a point of her orbit L. n. below the ecliptic, advancing towards her ascending node, the Sun's attraction will be in the direction L. S. the intensity of this force being represented by the line L. a. It may be decomposed into two forces, one L. T. towards the centre of the Earth, the other L. m. towards the plane of the ecliptic, the actions of these two forces would give the Moon an intermediate direction-L.x.o. and cause her to cross sooner the plane of the ecliptic. The arc described above the horizon by the Moon in summer appears to be much smaller than that described by her in winter, it is thus explained on the night of the winter solstice (21st or 22nd December) the Earth T. fig. 2 sees the Sun at S. on the tropic of Capricorn and the Moon at L. on the tropic of Cancer. the line of our horizon H.R. shows that the arc described above it by the sun is very small, whilst that described by the Moon is very extended. One complete revolution of the Moon round the Earth, that is from one point of her orbit to the same point again, is called a Periodical revolution and is performed in 27 days, 7 hours, 43 minutes, 4½ seconds. Now supposing the Moon L. fig. 1. at the beginning of her revolution, to be in conjunction i. e., between the Sun and the Earth, and that these three bodies and a star E. are on the same line R.E. at the end of her revolution, the Earth having advanced in its orbit, she will be at n in the plane x.z parallel to R. E. to be again in conjunction she must therefore describe on the arc n. L. a number of degrees equal to the arc T.t. or R.M. described by the Earth. The Synodical revolution or lunar month is the interval from one conjunction to another, a period of 29 days 12 hours, 44 minutes, 3 seconds.



DIURNAL MOTION OF THE MOON

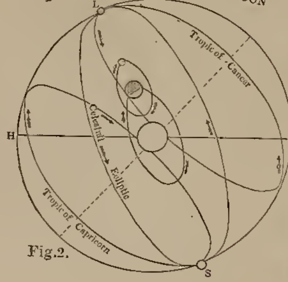


Fig.2.

The Moon revolving around the Earth and accompanying it in its annual revolution round the Sun, describes a peculiar curve in the heavens termed an Epicycloid. This curve is formed of 12 arcs and one-third nearly fig.3 A.C. Let the Earth T. advance an 8th part of 30 degrees to t. the Moon which was at first at L. will have described round the Earth the arc n. S. or an 8th part of a lunation and at the same time accompanying the Earth in its progress, will have traced in the heavens the portion of the Epicycloid L. S It is by a combination of the movements previously noticed that the Moon's phases or the various aspects under which she is seen from the Earth are caused. The central figure illustrates these changes of the Moon's appearance; thus, when in conjunction, i. e, between the Sun and the Earth, she is not visible because her dark side is turned towards us and she reaches the meridian at noon, it is then New Moon rather less than four days after the Moon which has reached the merian ¾ of an hour later each day, is perceived as a slender crescent with its points towards the east, she is then 45° distant from the point or conjunction of her first Octant when only a fourth part of her illuminated surface is seen from the Earth as marked at m.o. she then reaches the meridian at 3 o'clock in the afternoon. Arrived at 90° the point of conjunction, half of her disk is visible; she is then said to be in her first quarter and reaches the meridian at 6 in the evening. At 135° is her second Octant when ¾ of her disk are visible, she then reaches the meridian at 9 in the the evening. At 180° from the first point in her orbit, she will be again on the same line in opposition with the Sun, and will present to the earth the whole of her illuminated disk, reaching the meridian at midnight it is then full Moon. Passing from this point in her orbit, the Moon begins to wane, and three or four days after at 225° is in her third Octant, reaching the meridian at 3 in the morning and turning towards the Earth ¾ of her disk as in her second Octant, thus exhibiting in her decline appearances analogous to those in the earlier part of her revolution. The two points in the Moon's orbit where she is in opposition or in conjunction with the Sun are named Syzygies and those where she is in her first and last quarters. Quadratures.

LUNAR EPICYCLOID

Fig.3

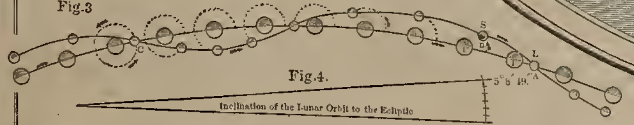


Fig.4.

INCLINATION OF THE ORBIT ECLIPSES. MOVEMENT OF THE NODES &c.

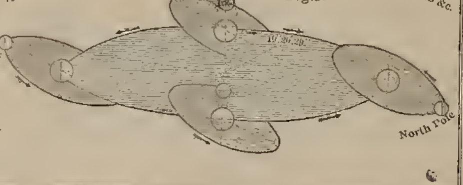


Fig.5.

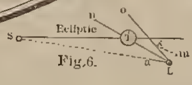


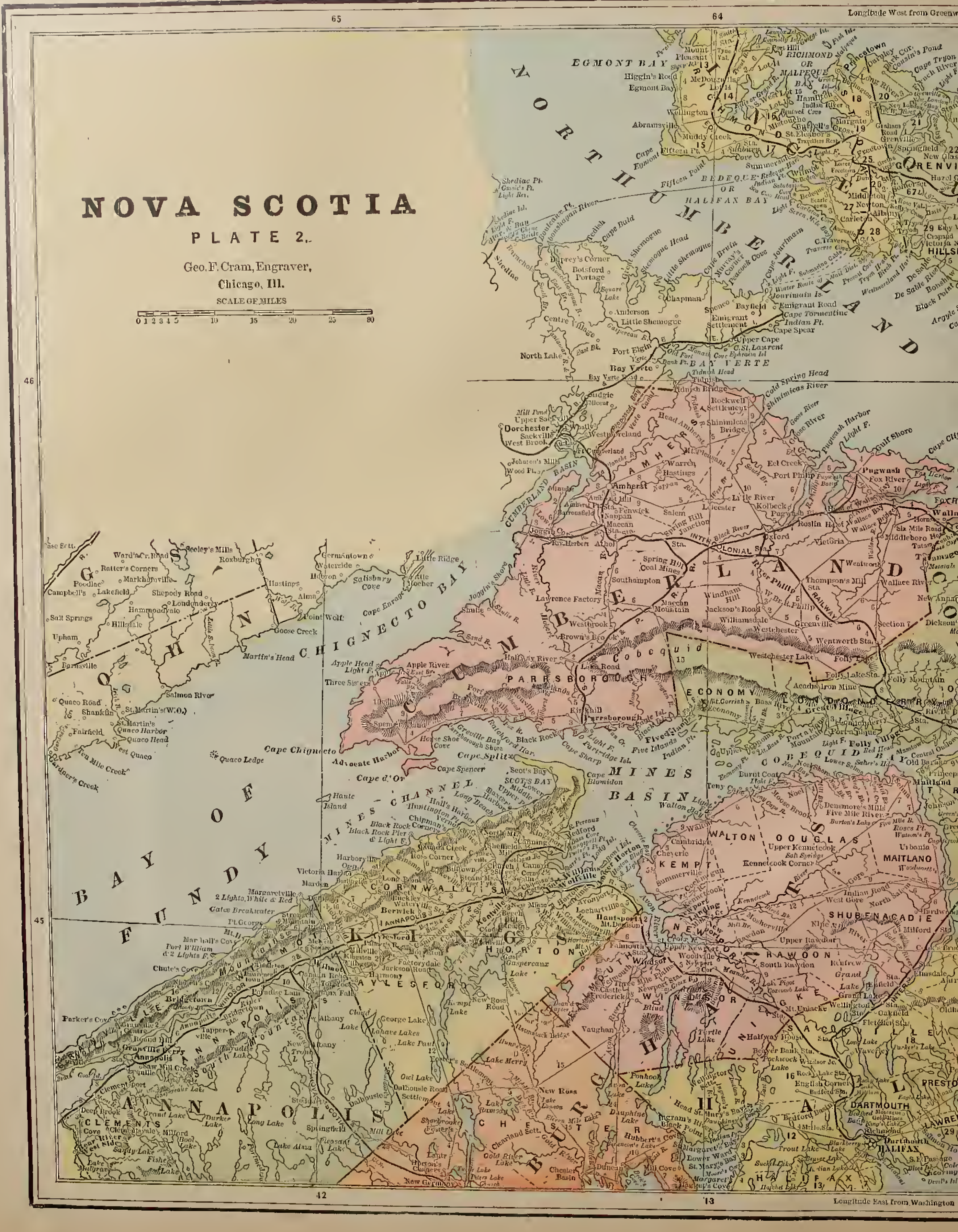
Fig.6.

NOVA SCOTIA

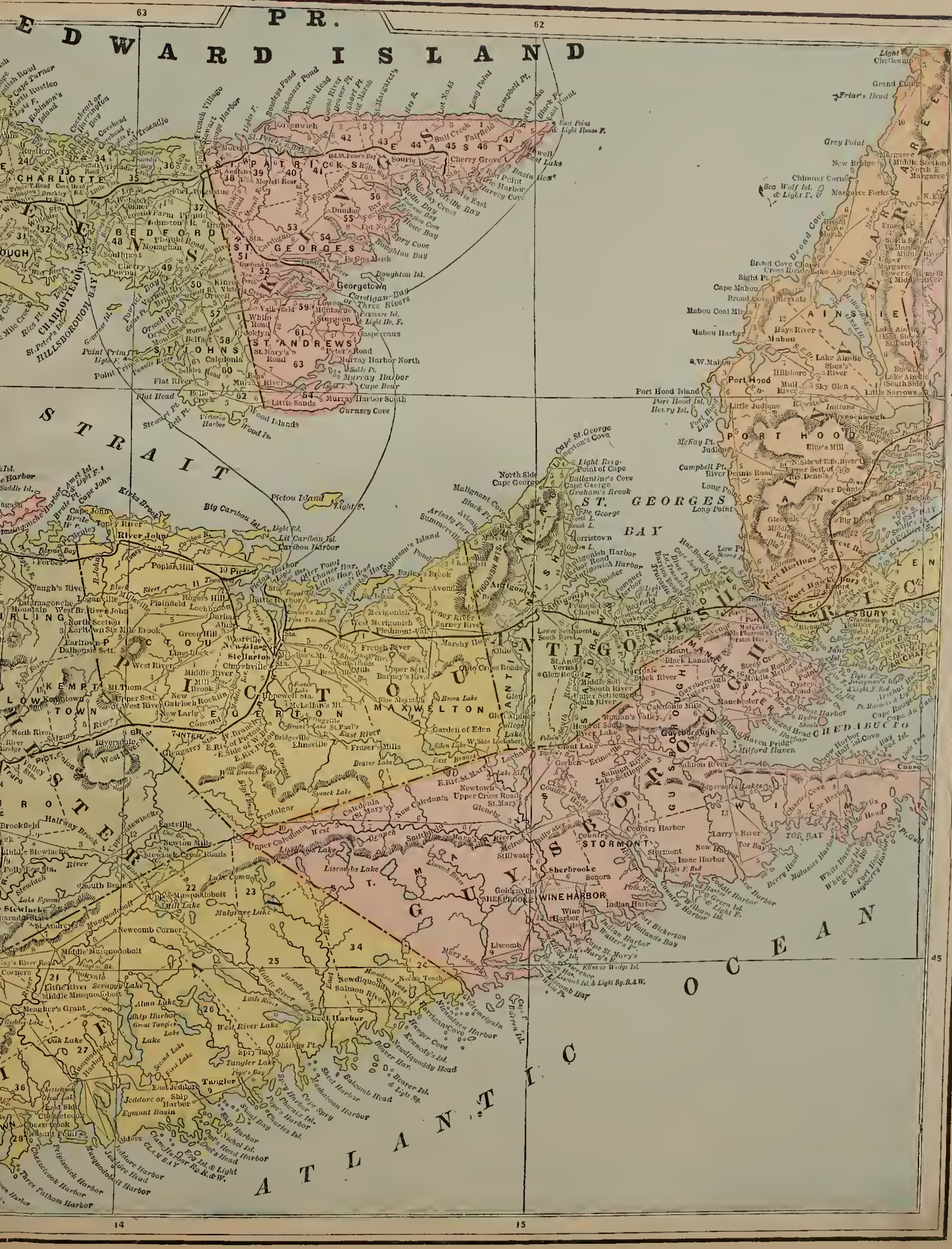
PLATE 2.

Geo. F. Cram, Engraver,
Chicago, Ill.

SCALE OF MILES



0 1 2 3 4 5 10 15 20 25 30
65
64
Longitude West from Greenw
46
45
42
13
Longitude East from Washington
NORTHUMBERLAND STRAIT
EGMONT BAY
BEDEQUE OR HALIFAX BAY
RICHMOND OR MALPEQUE BAY
PRINCE
BAY VERTE
CUMBERLAND BASIN
CHIGNECTO BAY
BAY OF FUNDY
MINES CHANNEL
MINES BASIN
COBEQUID BAY
ALBERT
WESTMORLAND
CUMBERLAND
COLCHESTER
HANTS
KINGS
ANNAPOLIS
LUNENBURG
HALIFAX
PARRSBOROUGH
ECONOMY
LONDONDERRY
CORNWALLIS
AYLESFORD
HORTON
FALMOUTH
WINDSOR
NEWPORT
RAWDON
DOUGLAS
WALTON
KEMPT
MAITLAND
SHUBENACADIE
CLEMENTS
CHESTER
DARTMOUTH
HALIFAX
Summerside
Dorchester
Sackville
Amherst
Pugwash
Wallace
Oxford
Spring Hill Coal Mines
Parrsborough
Kentville
Wolfville
Windsor
Annapolis
Bridgetown
Cape Chignecto
Cape Split
Cape d'Or
Cape Blomidon
Shediac
Port Elgin
Joggins Shore
Cape Spencer
Scot's Bay
Quaco Ledge
Advocate Harbor
Five Islands

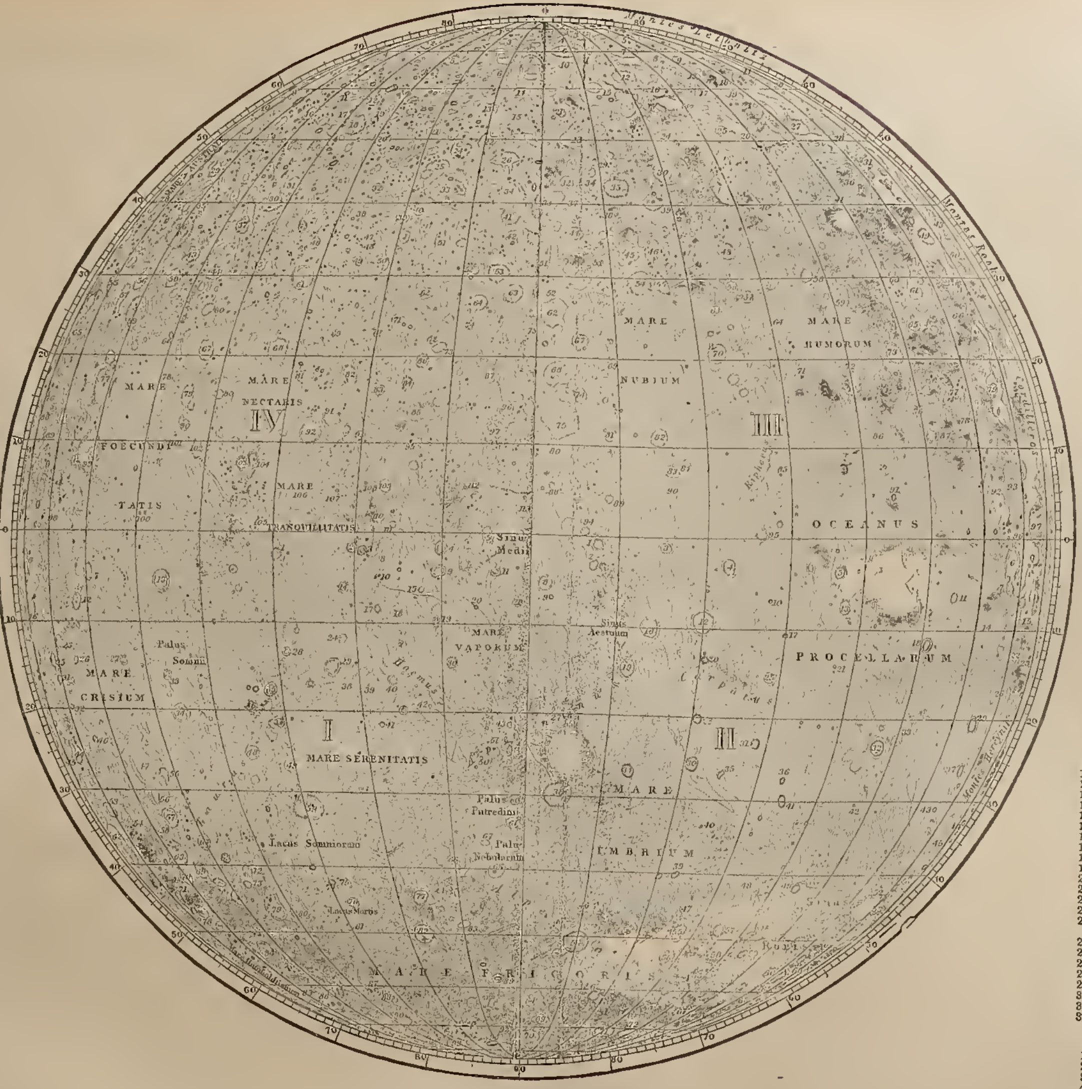


63
62
PR. EDWARD ISLAND
KINGS
CHARLOTTETOWN
HILLSBOROUGH BAY
Souris
Georgetown
Cardigan Bay
Murray Harbor
Montague
East Point
ST. PATRICKS
ST. GEORGES
ST. ANDREWS
ST. JOHNS
BEDFORD
STRAIT
Pictou Island
Big Caribou Isl.
Caribou Harbor
River John
Pictou Harbor
Pictou
New Glasgow
Stellarton
Westville
PICTOU
Truro
COLCHESTER
MAXWELTON
ANTIGONISH
Antigonish
Cape George
ST. GEORGES BAY
GUYSBOROUGH
Guysborough
Canso
CHEDABUCTO
Port Hastings
Port Hawkesbury
Arichat
RICHMOND
INVERNESS
PORT HOOD
Port Hood
Port Hood Island
Mabou
AINSLIE
Lake Ainslie
Margaree
Cheticamp
Friar's Head
Sea Wolf Isl. & Light F.
STORMONT
Sherbrooke
WINE HARBOR
Liscomb
Sheet Harbor
Tangier
Ship Harbor
Musquodoboit
Middle Musquodoboit
ATLANTIC OCEAN
46
45
14
15

SELENOGRAPHIC MAP
OF THE WHOLE
VISIBLE HEMISPHERE
OF THE
MOON.

In order to understand the phenomena exhibited by the Moon the most careful and accurate observation of every part of the lunar disk is required at all the various periods of her libration. The position of remarkable spots must be determined with the most rigourous exactitude, as it is found, from the change of situation relative to surrounding appearances, consequent upon the Moon's phases, that, a spot clearly distinguishable the naked eye upon her surface, when at the full, will be with difficulty discerned even by the glass towards the last quarter.

The appearances observed on the Moon's surface are caused either by difference of level, or by difference of the intensity of the light. The light reflected from the surface of the Moon is plainly seen to be of different shades; although the lighter parts are generally the mountains and the darker ones the low plains, still, careful observations have shown that this is not always the case, but that, the streaks of light, which at the full surpass in brilliancy all the adjacent parts, some times exist entirely independent of mountains, and extend alike over heights and valleys without being affected by them. Besides difference in intensity of the light, colors specifically different may be observed particularly green, sometimes a color of a reddish tint, at others a yellowish brown. The elevations of the Moon are in general of a much more precipitous nature than those of the earth. In the plate, the edges of the steeper craters, more especially those of small extent, are generally shown by a plain line___the narrow clefts or ravines by parallel line without a cross tint. The middle edge of the Moon (i. e. the great circle which in the mean libration seperates the hemisphere which is visible from that which is invisible) is necessarily delineated in profile. Chains of mountains, or mountainous regions of any importance, are named after the mountains of the earth, and the various spots after distinguished men, as annexed. To avoid confusing the objects in the plate by a profusion of figures, the Moon's surface is divided into four parts, the numbering of the spots in each commencing with unit.



I

1 Muskelyne
2 Sabine
3 Ritter
4 Godin
5 Rhaticus
6 Schubert
7 Apollonius
8 Dionysius
9 Agrippa
10 Ariadaus
11 Triesnecker
12 Firmicus
13 Tarantius
14 Arago
15 Silberschlag
16 Neper
17 Sosigenes
18 Julius Caesar
19 Boscovich
20 Higinus
21 Ukert
22 Azuf
23 Condorcet
24 Ross
25 Hausen
26 Prom. Agarum
27 Picard
28 Jansen
29 Plinius
30 Manilius
31 Alhazen
32 Alhazen S.
33 Proclus
34 Macrobius
35 Vitruvius
36 Maraldi
37 Littrow
38 P. Archerusia
39 Taquet
40 Menelaus
41 Bessel
42 Sulpic'sGallus
43 Conon
44 Orlaul
45 Plutarch
46 Eimmart
47 Cleomedes
48 Romer
49 Le Monnier
50 M. Hadley
51 Aratus
52 M. Bradley
53 Hahn
54 Berosus
55 Tralles
56 Burkhardt
57 Geminus
58 Bernoulli
59 Posidonius
60 Autolycus
61 Aristillus
62 Gauss
63 Messala
64 Berzelius
65 Franklin
66 Callippus
67 Theaetetus
68 Cassini
69 Hook
70 Schumacher
71 Struve
72 Cepheus
73 Oersted
74 Mason
75 Plana
76 Burg
77 Eudoxus
78 Mercurius
79 Atlas
80 Hercules
81 Baily
82 Aristoteles
83 Egede
84 Endymion
85 Strabo
86 Thales
87 Gortner
88 Democrit
89 Archytas
90 Arnold
91 Meton
92 Barrow
93 Euctemon
94 Scoresby
95 Gioja

II

1 Sommering
2 Schroter
3 Gambert
4 Reinhold
5 Encke
6 Hevel
7 Cavalerius
8 Pallas
9 Bode
10 Hortensius
11 Reiner
12 Copernicus
13 Kepler
14 Galilai
15 Olbers
16 Stadius
17 Milichius
18 Marius
19 Eratosthenes
20 Gay Lussac
21 Bessarion
22 Cardanus
23 Vascode Gama
24 M. Wolf
25 Mayer
26 Krafft
27 M. Huygens
28 Pytheas
29 Seleucus
30 Lambert
31 Euler
32 Aristarch
33 Herodot
34 Timocharis
35 Lahire
36 Diophantus
37 Briggs
38 Archimedes
39 Helicon
40 Carlini
41 Delisle
42 Wollaston
43 Lichtenberg
44 Ulugh Beigh
45 Lavoisier
46 Pico
47 Pm. Laplace
48 Heraclides
49 Mairan
50 Sharp
51 Louville
52 Harding
53 Gerard
54 Plato
55 Maupertius
56 Condamine
57 Bianchini
58 Bouguer
59 Harpalus
60 Oenopides
61 Repsold
62 Fontenelle
63 Horrebow
64 Trinaus
65 Cleostratus
66 Xenophanes
67 Anaximander
68 Pythagoras
69 Epigenes
70 Anaxagoras
71 Philolaus
72 Anaximenes

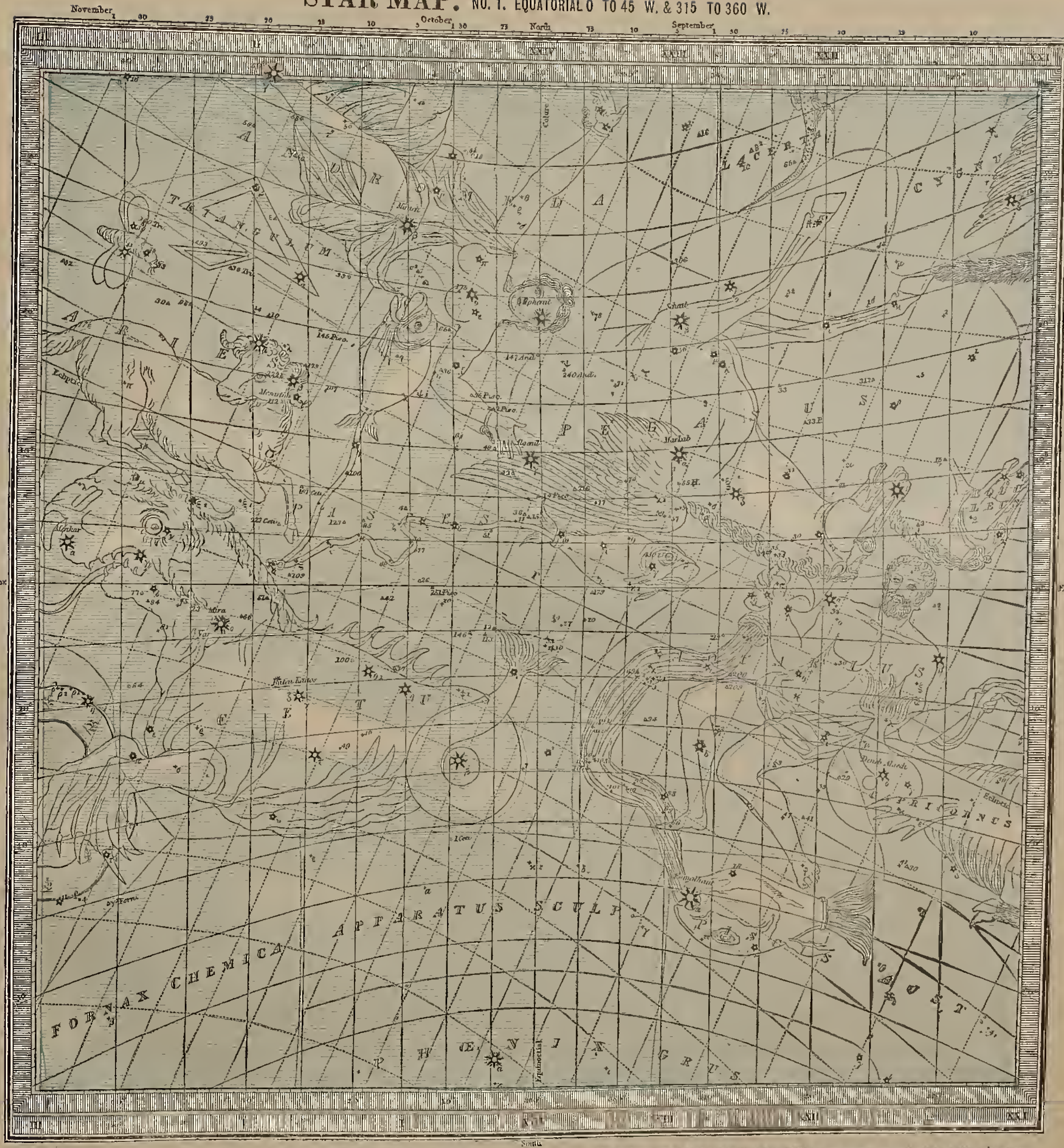
III

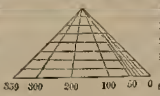
1 Malapert
2 Caheus
3 Newton
4 Short
5 Casatus
6 Moretus
7 Klaproth
8 Wilson
9 Kircher
10 Cysatus
11 Gruemberger
12 Blancanus
13 Bettinus
14 Bailly
15 Clavius
16 Scheiner
17 Weigel
18 Zuchius
19 Segner
20 Hausen
21 Deluc
22 Rost
23 Maginus
24 Longomontanus
25 Bayer
26 Schiller
27 Phocylides
28 Wargentin
29 Street
30 Wilhelm 1st
31 Inghirami
32 Saussure
33 Nasireddin
34 Pictet
35 Tycho
36 Schikard
37 Orontius
38 Sasserides
39 Heinsius
40 Hainzel
41 Drebbel
42 Lehmann
43 Bouvard
44 Lexell
45 Gauricus
46 Wurzelbauer
47 Cichus
48 Capuanus
49 Piazzi
50 Lagrange
51 Walter
52 Regiomontanus
53 Hell
54 Pitatus
55 Hesiodus
56 Mercator
57 Campanus
58 Vitello
59 Doppelmayer
60 Fourier
61 Vieta
62 Purbach
63 Kies
64 Hippalus
65 Cavendish
66 Byrgius
67 Thebit
68 Arzachel
69 P. Aenarium
70 Bullialdl
71 Agatharchides
72 Gassendi
73 Mersenius
74 Alpetragius
75 Alphons
76 Billy
77 Fontana
78 Sirsalis
79 Cruger
80 Ptolemaus
81 Davy
82 Guerike
83 Parry
84 Bonpland
85 Euclides
86 Letronne
87 Hansteen
88 Herschel
89 Lalande
90 Fra Mauro
91 Flamsteed
92 Damoiseau
93 Grimaldi
94 Mosting
95 Landsberg
96 Lohrmann
97 Riccioli

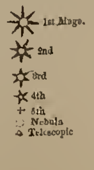
IV

1 Schomberger
2 Boguslawsky
3 Simpelius
4 Boussingault
5 Manzinus
6 Pentland
7 Curtius
8 Mutus
9 Pontecoulant
10 Hano
11 Hagecius
12 Nearch
13 Jacobi
14 Zach
15 Lilius
16 Biela
17 Rosenberger
18 Vlacq
19 Hommel
20 Pitiscus
21 Baco
22 Cuvier
23 Steinheil
24 Clairaut
25 Barocius
26 Licetus
27 Oken
28 Marinus
29 Vega
30 Metius
31 Fabricius
32 Nicolai
33 Maurolycus
34 Stofler
35 Frauenhofer
36 Furnerius
37 Rheita
38 Riccius
39 Busching
40 Buch
41 Fernelius
42 Nonius
43 Stevinus
44 Reichenbach
45 Neander
46 Stiborius
47 Rabbi
48 Levi
49 Lindenau
50 Zagut
51 GemmaFrisius
52 Poisson
53 Aliacensis
54 Humboldt
55 Legendre
56 Hase
57 Palitzsch
58 Snellius
59 Petavius
60 Borda
61 Piccolomini
62 Pontanus
63 Werner
64 Apianus
65 Hekataus
66 Biot
67 Santbech
68 Fracastor
69 Polybius
70 Fermat
71 Sacrobosco
72 Azophi
73 Abenezra
74 Playfair
75 La Caille
76 Behaim
77 Vendelinus
78 Cook
79 Colombo
80 Bohnenberger
81 Beaumont
82 Catharina
83 Tacitus
84 Almanon
85 Abulfeda
86 Geber
87 Airy
88 Ansgarius
89 Lapeyrouse
90 Magelhaens
91 Cyrillus
92 Theophilus
93 Kant
94 Descartes
95 Dollond
96 Parrot
97 Albategnius
98 Maclaurin
99 Langrenus
100 Messier
101 Goclenius
102 Guttemberg
103 Capella
104 Isidor
105 Censorinus
106 Torricelli
107 Hypatia
108 Alfraganus
109 Taylor
110 Delambre
111 Theonsen
112 Hipparchus
113 Reaumur

STAR MAP. NO. 1. EQUATORIAL 0 TO 45 W. & 315 TO 360 W.


November
October
North
September
Equator
Equator
ANDROMEDA
TRIANGULUM
ARIES
Ecliptic
Menkar
Mira
PISCES
PEGASUS
Markab
Alpherat
Scheat
LACERTA
CYGNUS
EQUULEUS
AQUARIUS
CAPRICORNUS
Ecliptic
CETUS
Fomalhaut
PISCIS AUST.
APPARATUS SCULP.
FORNAX CHEMICA
PHŒNIX
GRUS
Equinoctial
Colure
South


South
359
300
200
100
50
0


1st Magn.
2nd
3rd
4th
5th
Nebula
Telescopic

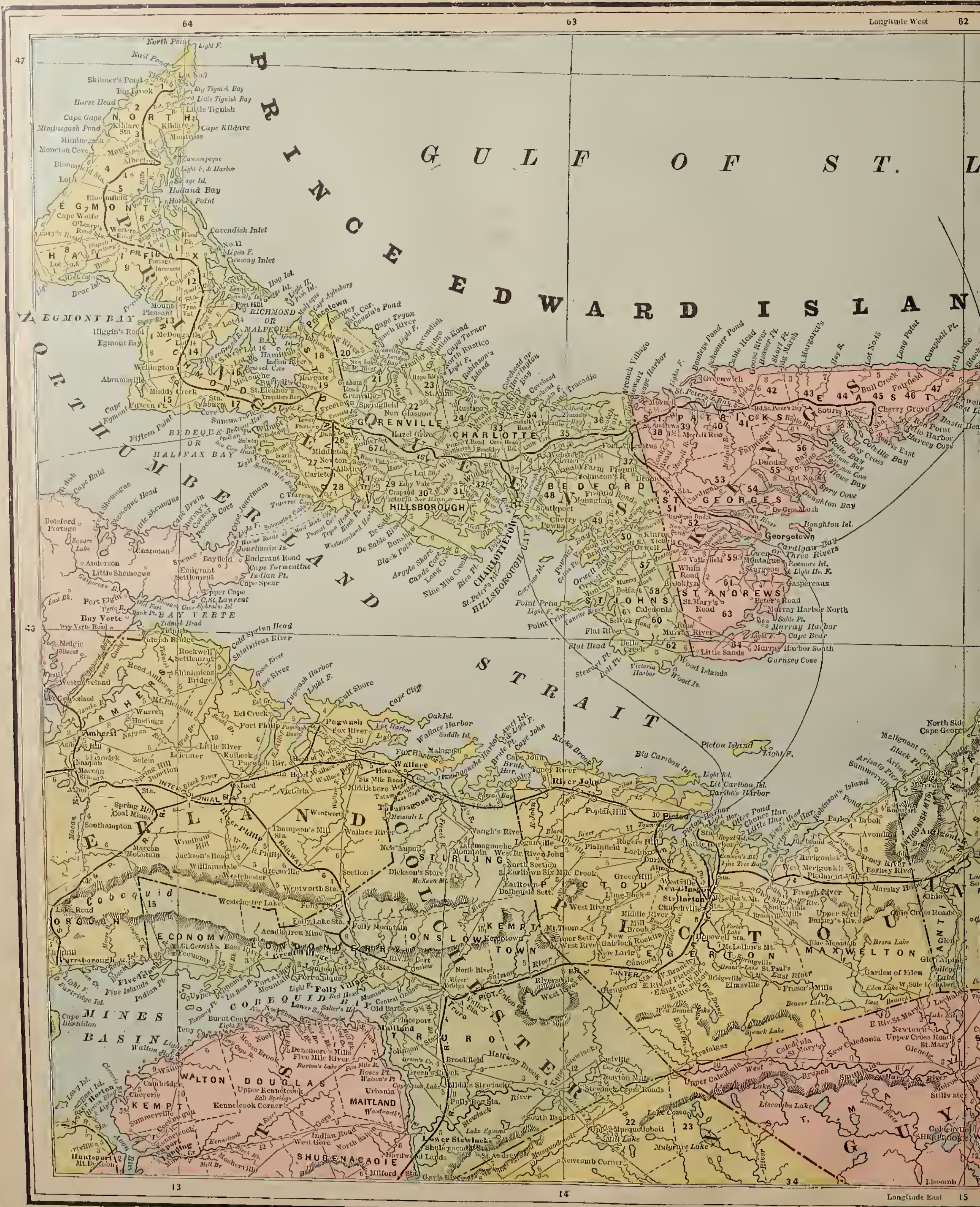
Constellations are the groups into which the fixed stars are divided; this division was begun in ancient times, and Ptolemy enumerates forty-eight constellations, viz:—The twelve signs of the zodiac, twenty-one in the northern hemisphere, and fifteen in the southern hemisphere. Those in the northern are, the Great Bear, the Little Bear, Perseus, the Dragon, Cepheus, Cassiopeia, Andromeda, Pegasus, the Little Horse, the Triangle, the Waggoner, Bootes, the Northern Crown, Ophiuchus, the Serpent, Hercules, the Arrow, the Lyre, the Swan, the Dolphin, the Eagle; and those in the southern hemisphere are, Orion, the Whale, Eridanus, the Hare, the Great Dog, the Little Dog, Hydra, the Cup, the Crow, the Centaur, the Wolf, the Altar, the Southern Fish, the Argo, and the Southern Crown. These constellations are still retained, but since Ptolemy's time many others have been added, more particularly in the southern hemisphere.

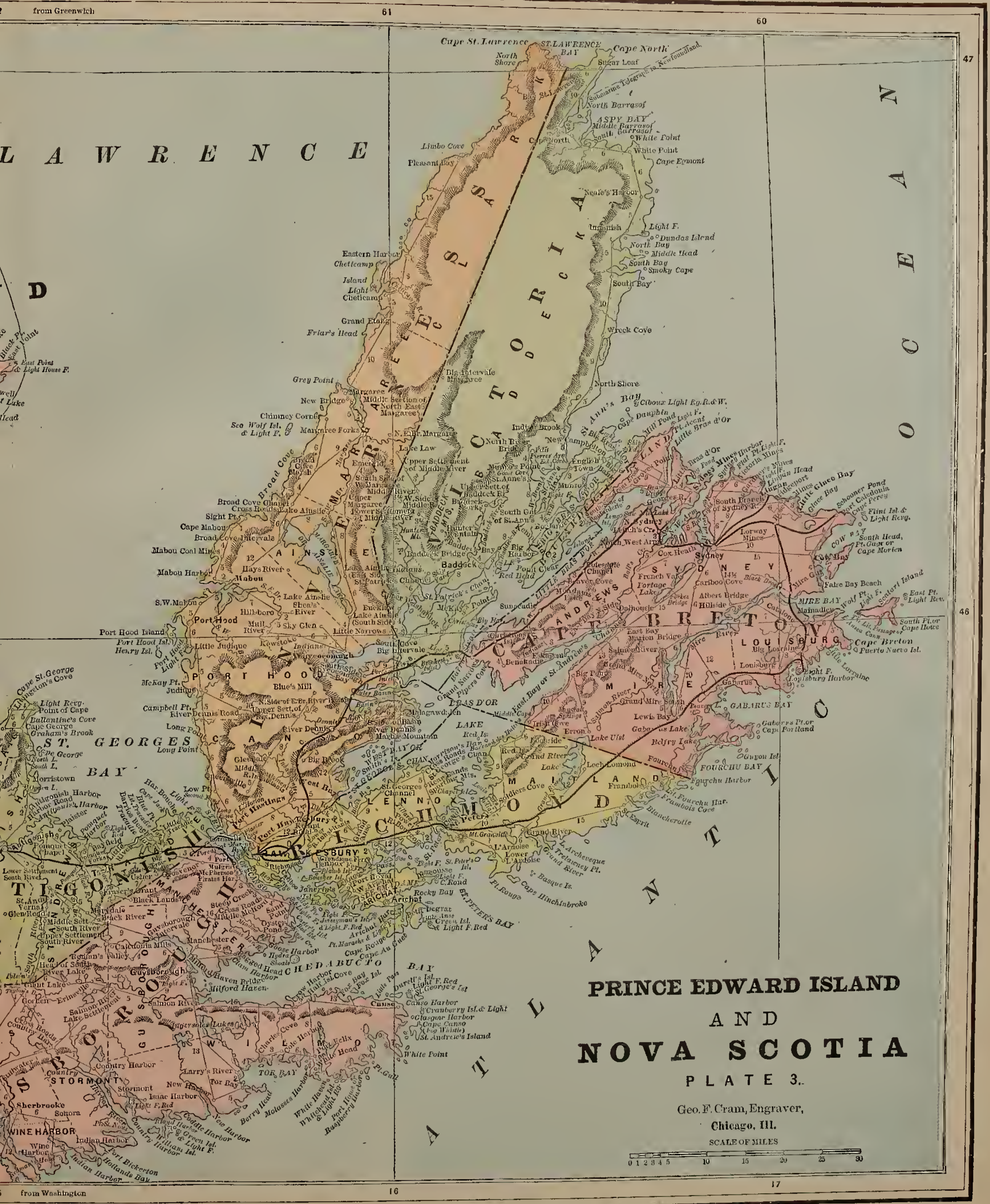
The more important stars in each constellation are designated by Greek letters, the brightest usually by α (Alpha), the next in order of brightness by β (Beta) the third by γ (Gamma), and the fourth by δ (Delta), and so on; thus on Map 1, near its left hand boundary, a little above the equator, the brightest star in Cetus with the name "Menkar" has also α near to it; the designation of this star is therefore α Ceti, and within the curl of the tail of Cetus is the star ζ Ceti. Still further to the right and lower down, nearly on the line joining α Ceti and β Ceti continued, is a star in Piscis Australis, Fomalhaut, also with α attached; the designation of this star is therefore α Piscis Australis. Several stars in the maps have, in addition to their designations by means of Greek letters and constellations, particular names by which they have been long known, such as Menkar and Fomalhaut, in the first map, Castor and Pollux in the second map, etc.

The line marked *Equator* in the maps separates the northern hemisphere from the southern hemisphere. Twice in the year the sun is on the equator, viz: at the beginning of spring and at the beginning of autumn, and at these times the lengths of the day and night are equal at all places on the earth; from this fact the name of Equator is derived.

The *Declination* of a star is its distance from the Equator measured in degrees, northward or southward; when the sun is on the equator, about March 20 and September 22, his declination is 0°; the greatest declination the sun can have is about 23½°; the declination of a star on the Equator is 0°, and of a star at the pole is 90°. The declinations are shown by curved lines separated from each other by 5°, and numbered at every 10° on each sides of the maps.

The *Right Ascension* of a star is its distance from the equinoctial point ♈ (in the centre of Map 1) reckoned on the Equator eastward, and expressed either in degrees and minutes, from 0° to 360° (as shown on the inner boundary at the top and bottom of the maps) or in hours and minutes, from 0h to 24h (as shown on the outer boundary at the top and bottom.)

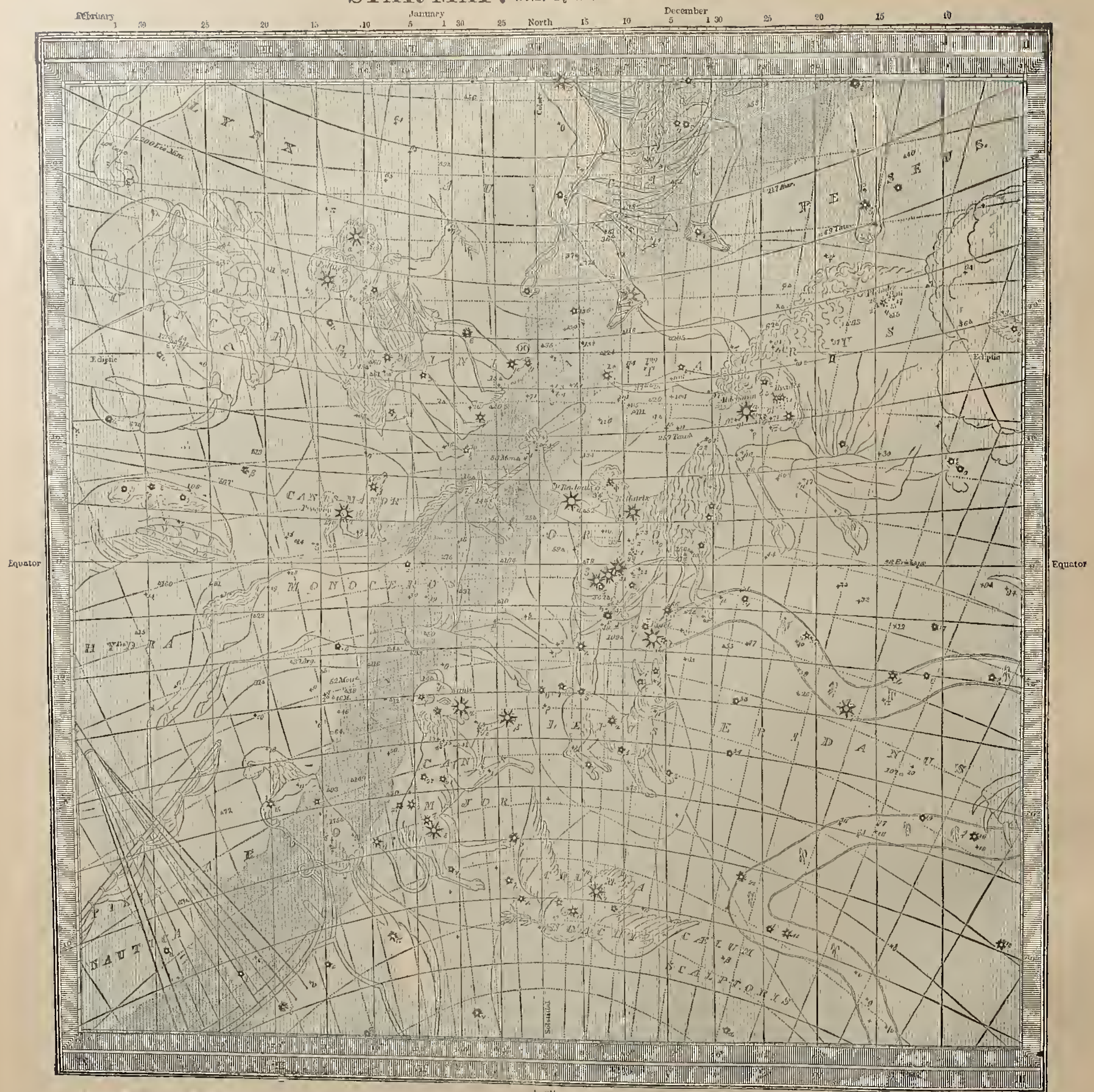

64
63
Longitude West
62
47
46
GULF OF ST. L
PRINCE EDWARD ISLAN
NORTHUMBERLAND STRAIT
PRINCE
KINGS
QUEENS
CHARLOTTETOWN
HILLSBOROUGH
Georgetown
Summerside
Souris
EGMONT BAY
BEDEQUE OR HALIFAX BAY
BAY VERTE
CUMBERLAND
AMHERST
Amherst
COLCHESTER
PICTOU
Pictou
New Glasgow
Truro
Wallace
Pugwash
Springhill
STIRLING
ECONOMY
ONSLOW
MAXWELTON
EGERTON
MINES BASIN
HANTS
WALTON
DOUGLAS
KEMPT
MAITLAND
SHUBENACADIE
GUYSBORO
ANTIGONISH
Pictou Island
Cape John
13
14
Longitude East
15

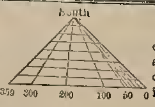

from Greenwich
61
60
47
46
16
17
from Washington
L A W R E N C E
D
O C E A N
A T L A N T I C
Cape St. Lawrence
ST. LAWRENCE BAY
Cape North
Sugar Loaf
North Shore
Submarine Telegraph to Newfoundland
North Barrasois
ASPY BAY
Middle Barrasois
South Barrasois
White Point
Cape Egmont
Limbo Cove
Pleasant Bay
Neale's Harbor
Ingonish
Light F.
Dundas Island
North Bay
Middle Head
South Bay
Smoky Cape
Eastern Harbor
Cheticamp
Island
Light
Cheticamp
Grand Etang
Friar's Head
Wreck Cove
Grey Point
Margaree
New Bridge
Chimney Corner
Sea Wolf Isl. & Light F.
Margaree Forks
North Shore
St. Ann's Bay
Ciboux Light Eg. R. & W.
Cape Dauphin
Broad Cove
Broad Cove Chapel
Cross Roads
Lake Ainslie
Sight Pt.
Cape Mabou
Broad Cove Intervals
Mabou Coal Mines
Mabou Harbor
Mabou
Hays River
S.W. Mabou
Port Hood Island
Port Hood
Fort Hood Isl.
Henry Isl.
Little Judique
McKay Pt.
Judique
Campbell Pt.
River Dennis Road
Long Point
ST. GEORGES BAY
Cape St. George
Livingston's Cove
Light Revg. Point of Cape
Ballantine's Cove
Cape George
Graham's Brook
Cape George
Morristown
Antigonish Harbor
Antigonish
Pomquet
Tracadie
Harbor Boucher
Low Pt.
Port Hastings
Port Hawkesbury
Mulgrave
KESBURY
PORT HOOD
INVERNESS
VICTORIA
CAPE BRETON
VICTORIA
BRAS D'OR LAKE
Baddeck
Big Harbor
Red Head
Sydney
North Sydney
Sydney Mines
Little Bras d'Or
Big Bras d'Or
Lingan Head
Little Glace Bay
Glace Bay
Schooner Pond
Port Caledonia
Cape Percy
Flint Isl. & Light Revg.
COW BAY
South Head
Pt. Gage or Cape Morien
Mira Gut
False Bay Beach
MIRE BAY
Wolf Pt.
Scatari Island
East Pt. Light Rev.
Main-a-dieu
South Pt. or Cape Howe
Cape Breton
Puerto Nuevo Isl.
LOUISBURG
Louisburg
Little Lorraine
Light F. Louisburg Harbor
Gabarus
GABARUS BAY
Gabarus Pt. or Cape Portland
Guyon Isl.
FOURCHU BAY
Fourchu Harbor
Framboise
Framboise Cove
Blancherotte
Esprit
ST. ANDREWS
SYDNEY
MIRE
Grand Mire
Lake Uist
Loch Lomond
East Bay
St. Peters
St. Peter's Isl.
ST. PETER'S BAY
RICHMOND
L'Ardoise
Lower L'Ardoise
Grand River
L. Archeveque
Basque Is.
Cape Hinchinbroke
Pt. Rouge
Arichat
Rocky Bay
Isle Madame
Petit Degrat
Green Isl. Light F. Red
CHEDABUCTO BAY
Guysborough
Manchester
Milford Haven
Canso
Canso Harbor
Cranberry Isl. & Light
Glasgow Harbor
Cape Canso
St. Andrew's Island
White Point
TOR BAY
Larry's River
Country Harbor
STORMONT
Stormont
Isaac Harbor
New Harbor
Sherbrooke
Sonora
WINE HARBOR
Indian Harbor
Port Bickerton
Hollands Bay
GUYSBOROUGH
ANTIGONISH
SCALE OF MILES
0 1 2 3 4 5 10 15 20 25 30

PRINCE EDWARD ISLAND
AND
NOVA SCOTIA
PLATE 3.

Geo. F. Cram, Engraver,
Chicago, Ill.

STAR MAP. NO.2. EQUATORIAL 45 TO 135 W.


February
1
30
25
20
15
10
January
5
1
30
25
North
15
10
December
5
1
30
25
20
15
10
Equator
Equator
Ecliptic
Ecliptic
Colure
Solstitial
LYNX
AURIGA
PERSEUS
TAURUS
Pleiades
Aldebaran
Hyades
GEMINI
CANIS MINOR
Procyon
ORION
Betelgeuse
Bellatrix
Rigel
MONOCEROS
HYDRA
LEPUS
ERIDANUS
CANIS MAJOR
Sirius
COLUMBA
CAELUM SCALPTORIS
NAUT

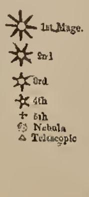

South
359
300
200
100
50
0

The line passing vertically through the centre of Map 1 (the equinoctial color) is the line of right ascension 0h, and all lines parallel to this on the Maps 1, 2, 3, 4, are lines of right ascension. They are separated from each other by intervals of 20 minutes, thus all stars on the first line to the left of ♈ are of right ascension 0h 20m; those on the second are of right ascension ,0h 40m; those on the third are of right ascension 1h 0m, and so on through Maps 1, 2, 3, 4, to the right hand side of Map 1, and so back to the equinoctial color.

The position of a star, with respect to the Equator, is thus determined by the intersection of their lines of right ascension and declination.

The line marked *Ecliptic* is that great circle of the celestial sphere in which the sun appears to describe its path. It cuts the Equator in two points, viz., the first point of Aries (♈) and the first point of Libra (♎), which are respectively the centres of Maps 1 and 3. The vertical lines through these points are termed the equinoctial colors; as already mentioned, the sun passes through these points about March 20 and September 22. About June 21 the sun's northern declination is the greatest, and he is at the first point of Cancer, (marked (♋) on Map 2;) and about December 21 his southern declination is greatest, and he is at the first point of Capricornus (marked ♑ on Map 4); the vertical lines through these points (which pass through the centres of Maps 2 and 4) are called the solstitial colors.

In Maps 1 and 3 the ecleptic is an inclined line passing through the centre of the map; in Maps 2 and 4 it is a line parallel to the equator, *above* it in Map 2 and *below* it in Map 4.

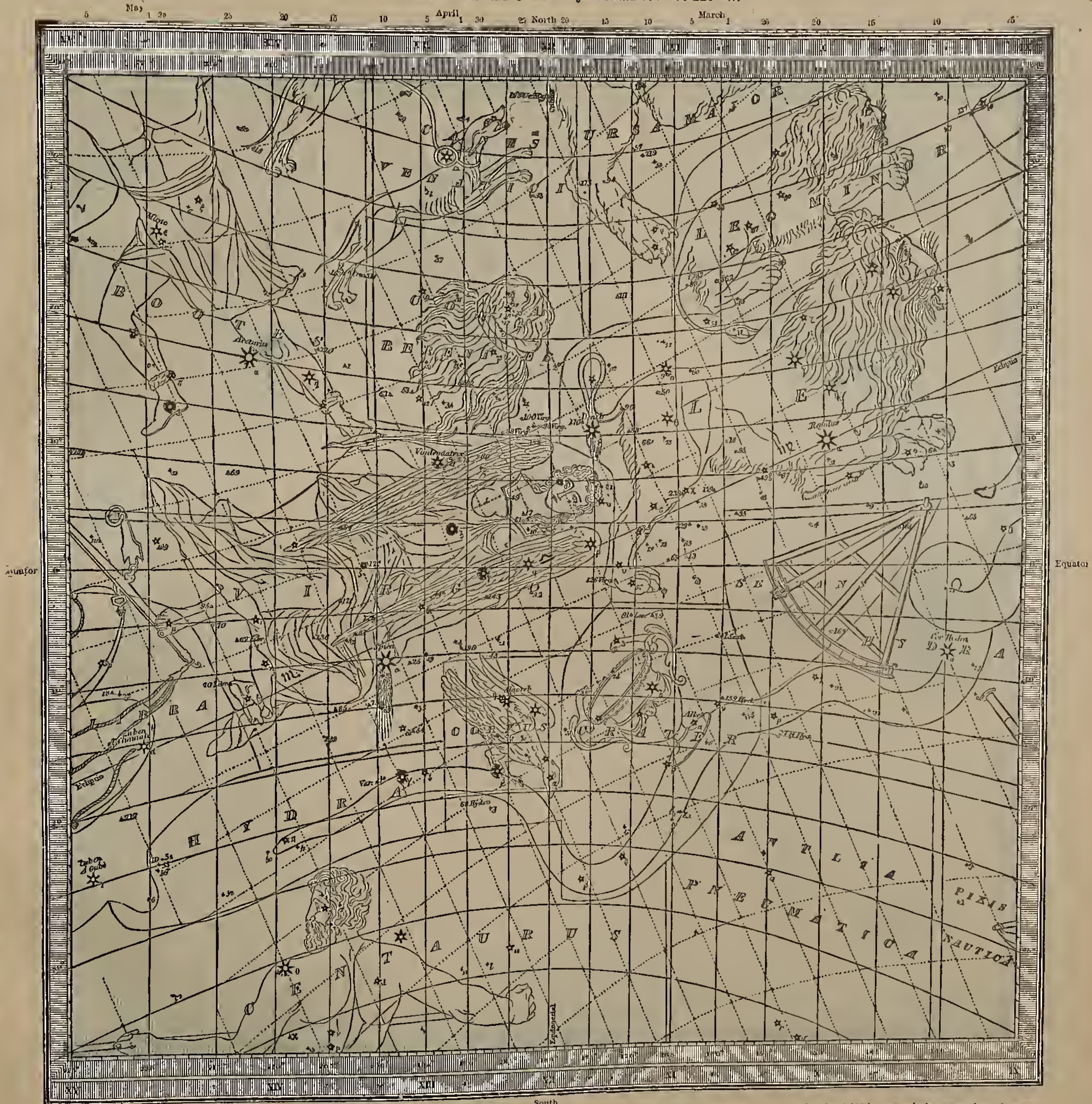

1st Mage.
2nd
3rd
4th
5th
Nebula
Telescopic

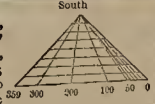
The twelve *signs of the Zodiac* are twelve equal arcs of 30° each, into which the ecliptic is divided; they are named from the twelve constellations through which the sun passes. Starting from the vernal equinox (♈), whose longitude is 0°, and which occupies the centre of Map 1, and reckoning towards the east, the sun enters each sign in the following order:

About	March	20	the sun enters	Aries ♈,	whose longitude is	0°	Map I.
“	April	20	“	Taurus ♉	“	30°	
“	May	21	“	Gemini ♊	“	60°	“ 2.
“	June	21	“	Cancer ♋	“	90°	
“	July	22	“	Leo ♌	“	120°	
“	Aug.	33	“	Virgo ♍	“	150°	“ 3.
“	Sept.	22	“	Libra ♎	“	180°	
“	Oct.	23	“	Scorpio ♏	“	210°	
“	Nov.	22	“	Sagittarius ♐	“	240°	“ 4.
“	Dec.	21	“	Capricornus ♑	“	270°	
“	Jan.	19	“	Aquarius ♒	“	300°	
“	Feb.	18	“	Pisces ♓	“	330°	“ 1.

The *Latitude* of a star is its distance from the ecliptic, measured northward or southward in degrees and minutes. The latitudes are shown by dotted lines distant 5° from one another; they are more curved the further they are from the ecliptic.

STAR MAP. No. 3. EQUATORIAL 135 TO 225 W.


May
5
1
30
25
20
15
10
5
April
1
30
25
North
20
15
10
5
March
1
25
20
15
10
5
Equator
Equator
URSA MAJOR
CANES VENATICI
LEO MINOR
BOOTES
Arcturus
COMA BERENICES
LEO
Regulus
Ecliptic
Vindemiatrix
VIRGO
Spica
SEXTANS
HYDRA
Cor Hydræ
CRATER
Alkes
CORVUS
Algorab
LIBRA
Zuben el Genubi
ANTLIA PNEUMATICA
PIXIS NAUTICA
CENTAURUS
Equinoctial
South
XIV
XIII
XI
X
IX


South
359
300
200
100
50
0

The *Longitude* of a star is its distance from ♈ measured along the ecliptic eastwards, and is expressed in degrees and minutes from 0° to 360°. The dotted line through ♈ perpendicular to the ecliptic is the line of longitude 0°, and the dotted straight lines, distant 5° from one another, and which cut the lines of latitude, are the lines of longitude; for example, where the sixth line of longitude cuts the ecliptic (on Map 1) is found ♉, the longitude of which is therefore 30°, and so on throughout the twelve signs of the zodiac up to 360°.

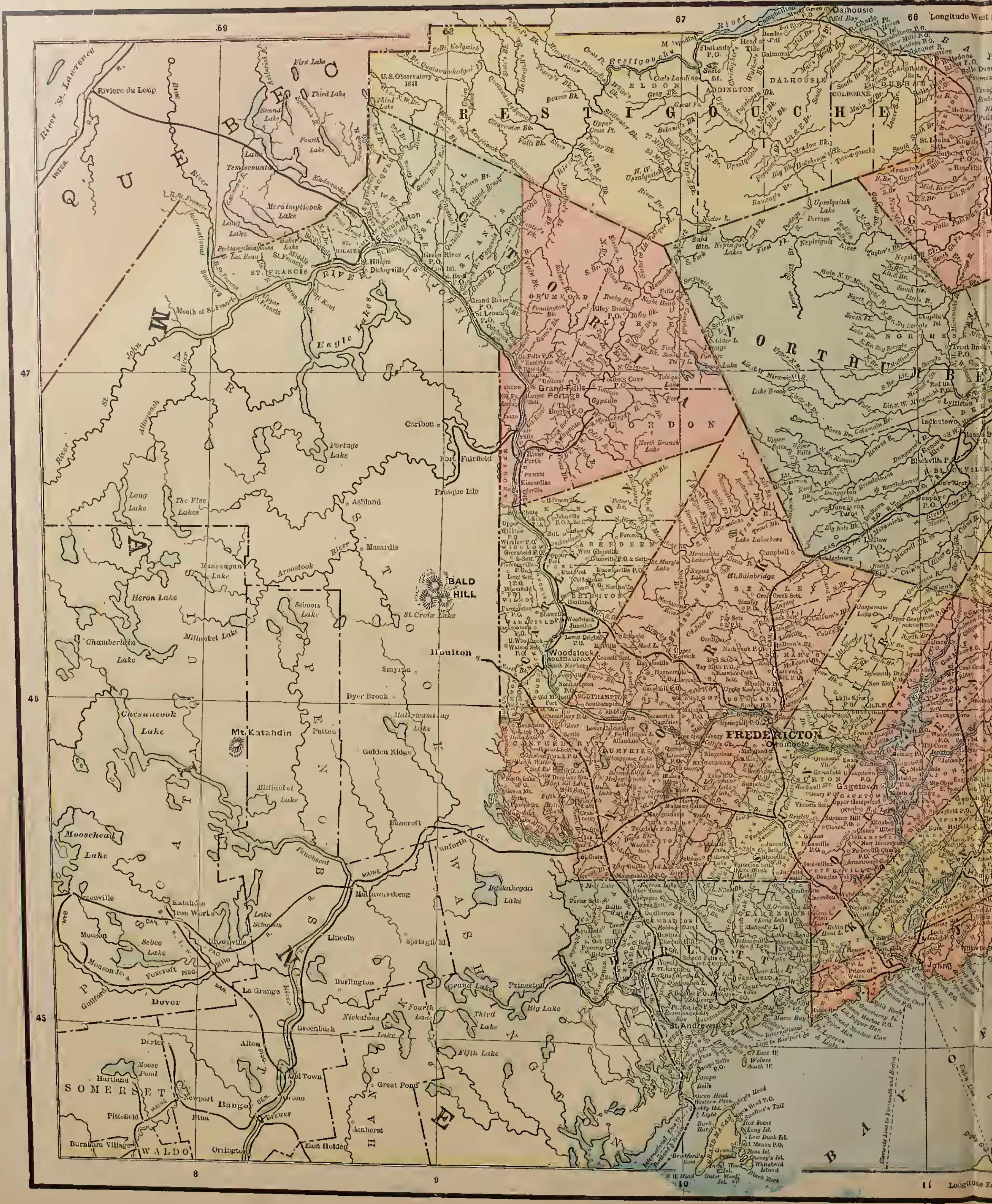
The months and days of the year, which are placed on the upper border of the maps, denote the dates at which the stars in the vertical lines under them will pass the meridian at midnight. Thus for example, from Map 1, Algenib (γ Pegasi) and Alpherat pass the meridian at midnight about September 20th. The manner in which these dates are obtained may be easily explained as follows: When the sun is on the equator on March 20 at the vernal equinox his longitude is 0°, and when he is on the equator on September 22 at the autumnal equinox his longitude is 180°. At the vernal equinox all the stars whose right ascension is 0^h pass the meridian at the same time as the sun, and such stars six months afterwards will pass the meridian about twelve hours before the sun, *i. e.* at midnight. The stars Algenib and Alpherat will, therefore, pass the meridian about noon on March 20, and about midnight on September 20.

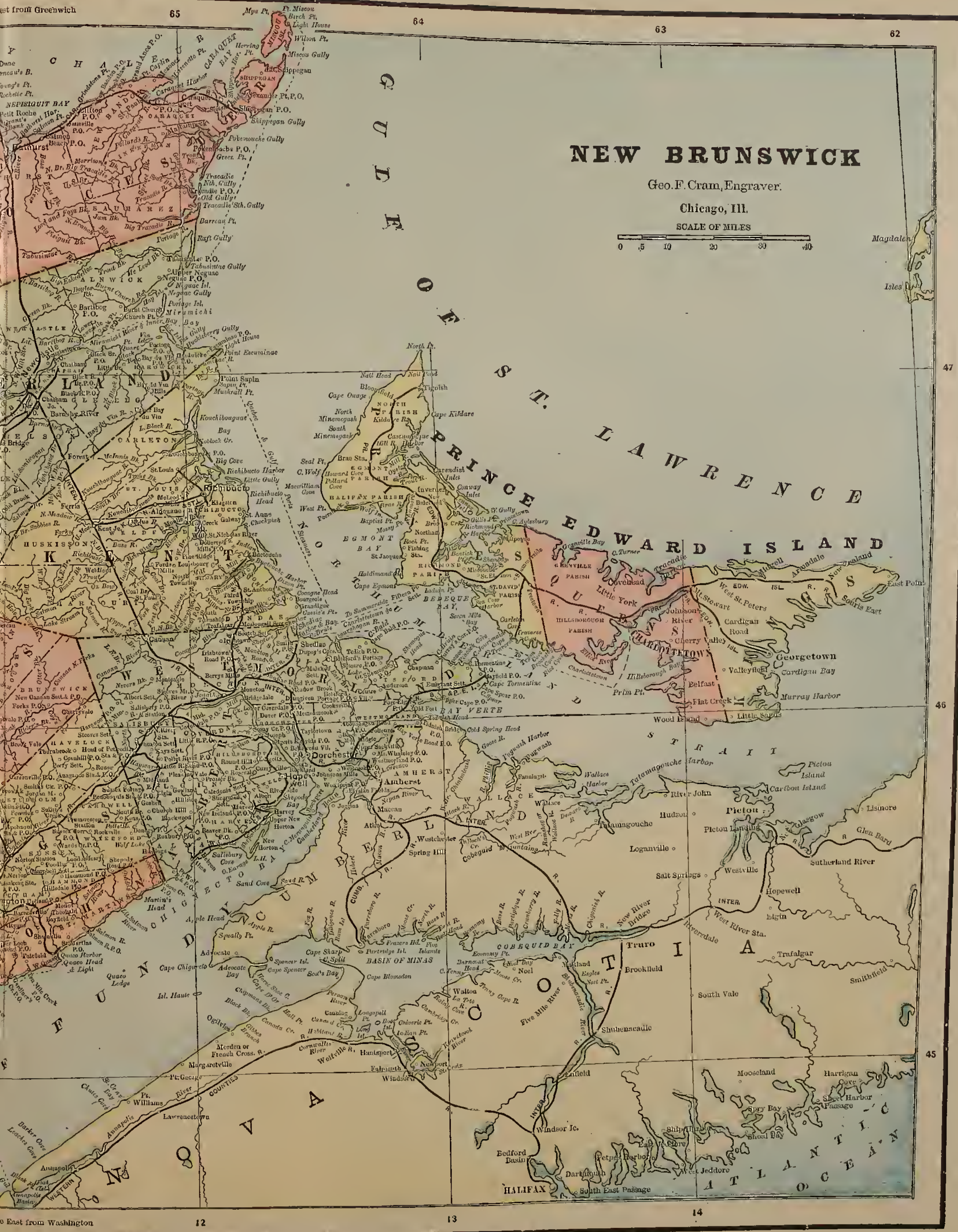
✷ 1st Magn.
✶ 2nd
✵ 3rd
✴ 4th
+ 5th
⁂ Nebula
△ Telescopic

As the sun's longitude increases by about 30° in a month, he approximately passes through one degree a day, therefore on the 25th of March he will be at the point where the first dotted line to the left of ♈ cuts the ecliptic, and on the 30th where the second dotted line cuts the ecliptic, and so on. The sun's longitude on April 20 is 30°, and he is then at the first point of Taurus (♉); all stars, therefore, which have nearly the same right ascension as this point (for example γ Andromedæ, α Arietis, β Arietis) pass the meridian at about noon on this day, and six months afterwards, on October 20, at about midnight, as shown by this date which appears at the top of the map.

The sun's place in the heavens can, therefore, be readily determined by the maps for every day in the year, and the stars which pass the meridian at about noon or midnight on every day can be similarly determined.

The difference between the right ascension of the sun and the right ascension of a star will give a rough approximation to the time of the passage of the latter across the meridian; thus, on March 20, when the sun's right ascension is 0^h, marked XXIV. on the maps, all stars, whose right ascension is 6 hours, 7 hours, 8 hours, &c., will be nearly due south at 6 p. m., 7 p. m., 8 p. m., &c; for example, the sun enters Taurus about April 20; this point (see Map 1) is a little to the right of the two-hour line or right ascension (about nine minutes), therefore the sun's


Longitude West
69
68
67
66
47
46
45
8
9
10
11
QUEBEC
MAINE
RESTIGOUCHE
VICTORIA
CARLETON
YORK
CHARLOTTE
SUNBURY
NORTHUMBERLAND
GLOUCESTER
PISCATAQUIS
AROOSTOOK
PENOBSCOT
WASHINGTON
SOMERSET
WALDO
HANCOCK
BAY OF FUNDY
River St. Lawrence
Riviere du Loup
Temiscouata Lake
St. John River
St. Francis
Eagle Lakes
Allaguash
Long Lake
The Five Lakes
Chamberlain Lake
Heron Lake
Millinoket Lake
Chesuncook Lake
Mt. Katahdin
Moosehead Lake
Greenville
Monson
Dover
Guilford
Sebec Lake
Katahdin Iron Works
Brownville
Milo
La Grange
Lincoln
Mattawamkeag
Springfield
Burlington
Nickatous Lake
Greenbush
Alton
Old Town
Orono
Bangor
Brewer
Orrington
Newport
Pittsfield
Hartland
Burnham Village
Dexter
Great Pond
Amherst
East Holden
Princeton
Grand Lake
Big Lake
Baskahegan Lake
Danforth
Bancroft
Golden Ridge
Patten
Dyer Brook
Smyrna
Houlton
St. Croix Lake
BALD HILL
Masardis
Ashland
Presque Isle
Caribou
Fort Fairfield
Portage Lake
Squapan Lake
Aroostook River
Grand Falls
Woodstock
Fredericton
Oromocto
Gagetown
St. Andrews
St. George
Campobello
Grand Manan
Dalhousie
Campbellton
Bathurst
Upsalquitch Lake
Nepisiguit Lakes
Miramichi
Boiestown
Blackville
Doaktown
Dungarvon
Chaplin's Isl.
Gaspereau Lake
Mud L.
Stanley
Nashwaak
Magaguadavic
Baillie
St. Stephen
Moores Mills
Grand Lake
Penobscot
Mooses



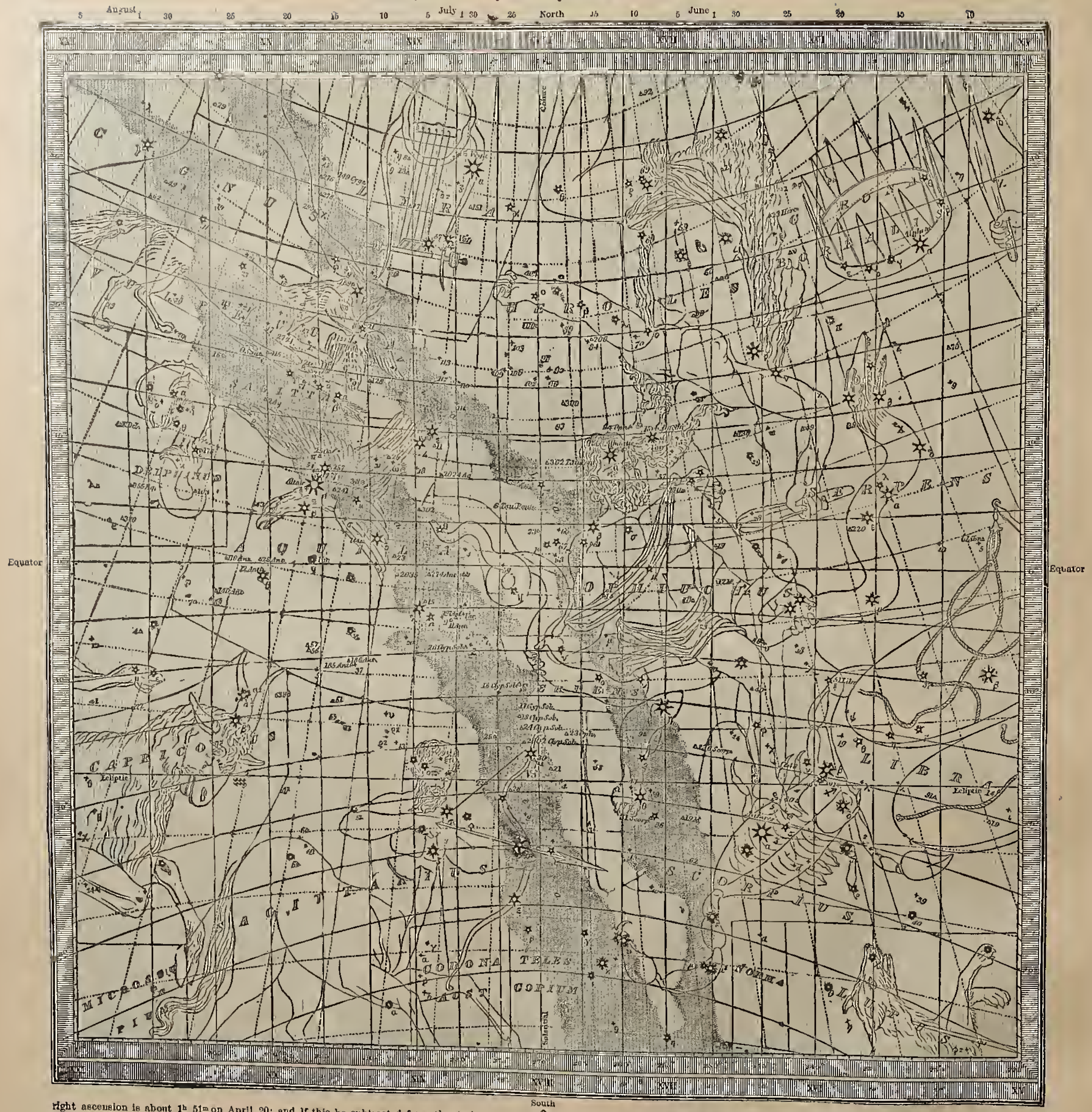
NEW BRUNSWICK

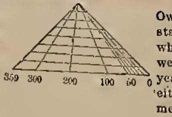
Geo. F. Cram, Engraver.

Chicago, Ill.

SCALE OF MILES
0
5
10
20
30
40
est from Greenwich
65
64
63
62
47
46
45
e East from Washington
12
13
14
GULF OF ST. LAWRENCE
PRINCE EDWARD ISLAND
NORTHUMBERLAND STRAIT
QUEENS
KENT
WESTMORLAND
ALBERT
CUMBERLAND
NORTHUMBERLAND
GLOUCESTER
BAY OF FUNDY
NOVA SCOTIA
ATLANTIC OCEAN
CHIGNECTO BAY
COBEQUID BAY
BASIN OF MINAS
BAY VERTE
EGMONT BAY
BEDEQUE BAY
CARAQUET BAY
NEPISIGUIT BAY
Magdalen Isles
Charlottetown
Georgetown
Summerside
Moncton
Dorchester
Sackville
Amherst
Hopewell
Richibucto
Chatham
Bathurst
Newcastle
Truro
Pictou
New Glasgow
Windsor
Halifax
Dartmouth
Annapolis
Shubenacadie
Miscou
Shippegan
Tignish
Cape Kildare
North Pt.
East Point
Pictou Island
Westchester
Spring Hill
Parrsboro
Wallace
Tatamagouche
Isl. Haute
Cape Chignecto
Cape Tormentine

STAR MAP. NO.4. EQUATORIAL 225 TO 315 W.


5
August 1
30
25
20
15
10
5
July 1
30
25
North
15
10
5
June 1
30
25
20
15
10
XXI
XX
XIX
XVIII
XVII
XVI
XV
Equator
Equator
Colure
Solstitial
Vega
Altair
Ecliptic
Ecliptic
CYGNUS
LYRA
HERCULES
CORONA BOREALIS
SERPENS
OPHIUCHUS
AQUILA
DELPHINUS
CAPRICORNUS
SAGITTARIUS
SCORPIUS
LIBRA
CORONA AUST
TELESCOPIUM
NORMA
LUPUS
MICROSCOPIUM
South

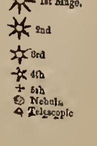

359
300
200
100
50
0

right ascension is about 1h 51m on April 20; and if this be subtracted from the star's right ascension, the difference will roughly be the time of the star's passing the meridian. Thus, the right ascension of Regulus is 10h 2m; taking 1h 51m from 10h 2m, the difference is 8h 11m, at which time Regulus will be near the meridian. Again, the sun enters Libra (Map 3) about September 22, and his right ascension is 12 hours; all stars, therefore, whose right ascension is 13 hours, 14 hours, etc., pass the meridian at 1 p. m., 2 p. m., etc., on this day, and so on. A star whose right ascension is 18h would pass the meridian at about 6 p. m., and one whose right ascension is 19h 45m (*a* Aquilæ) will pass the meridian at about 7.45 p. m.

As the sun's longitude increases by about 1° each day, or 30° in a month, the stars come to the meridian about 3m 56s earlier each day, or by about 2h in a month; thus Alpherat, which passes the meridian at about midnight on September 20, passes the meridian about 10 p. m., on October 20, and at about 2 o'clock in the morning on August 20.

The explanation of the different lines on Maps 5 and 6, in which the north pole and south pole occupy respectively the centre of the map, is sufficiently evident after what has been said of Maps 1, 2, 3 and 4.

Each successive year the position of the point of intersection of the ecliptic with the equator is 50s .3 west of that of the preceding year; this point thus retreats along the ecliptic, and performs a whole revolution in the heavens in about 25,750 years.

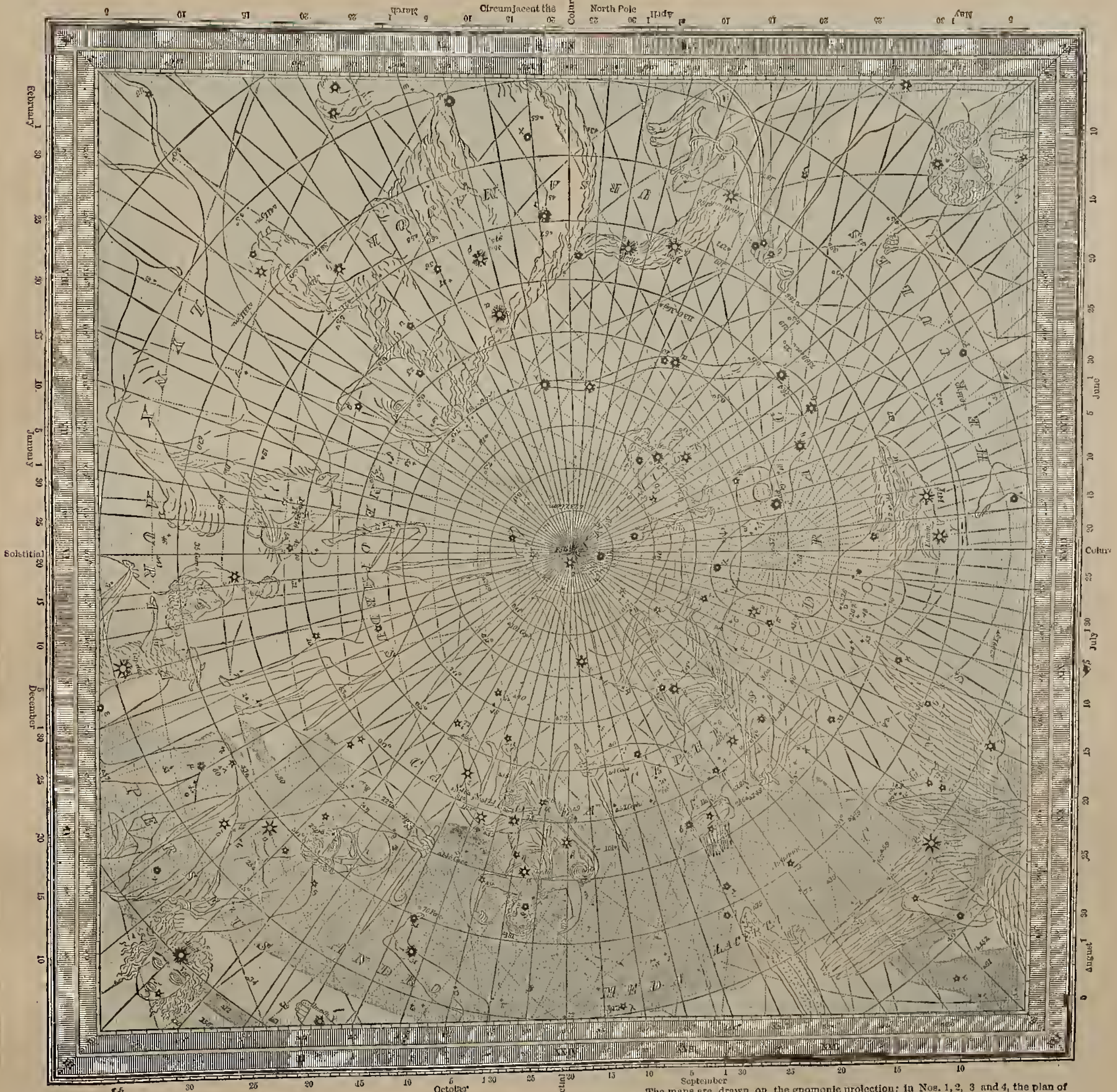

1st Mag.
2nd
3rd
4th
5th
Nebula
Telescopic

Owing to this motion, termed the "precession of the equinoxes," the places of the stars are slowly changing (being shifted in longitude toward the east) and differ somewhat at present from those which they occupied at the epoch 1830, for which the maps were constructed; but these differences are, at the present time, and will be for some years to come, so small as not to effect their usefulness to any appreciable degree, either for finding the stars in the heavens or deducing the times of their passing the meridian, or for any other purpose contemplated in their publication.

The small triangle at the foot of each map is intended to facilitate the correction of the places of the stars for precession; it gives the precession in longitude for 50 years, 100 years, 200 years, 300 years, and 359 years, a line being taken parallel to the base equal in length to 5° measured on the line of latitude on which the star is situated. For example, to apply the correction for 50 years to any star, we measure with the compasses a distance equal to 5° along the line of latitude at the star, and find the line parallel to the base of the triangle which is equal to this distance; the shaded portion of this line is then equal to the precession. The base of the triangle is equal to the largest space which represents 5° along a line of latitude on the map, and 359 years is of course the time in which the precession amounts to 5°.

The positions of the principal stars in each of the maps for the year 1883 are given in the following tables, and the change of position since 1830 can be readily seen by comparing the positions of the stars on the maps with their places in these tables.

STAR MAP. No.5. NORTH POLAR

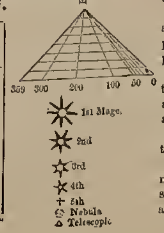

Circumjacent the North Pole
Colure
March
April
May
February
January
Solstitial
December
June
July
Colure
August
October
Equinoctial
September

LIST OF THE PRINCIPAL STARS IN THE

CONSTELLATIONS OF THE ZODIAC.

CONSTELLATIONS.	NAMES OF STARS.	Right Ascension, Jan. 1, 1883.			Declination, Jan. 1, 1883.				Map.
		H.	M.	S.	°	′	″		
Aries	α Arietis	2	0	35	22	54	30	N	1
Taurus	Aldebaran	4	29	12	16	16	22	N	2
Gemini	Castor	7	27	8	32	8	38	N	2
Cancer	α Cancri	8	52	5	12	18	35	N	2
Leo	Regulus	10	2	8	12	32	19	N	3
Virgo	Spica	13	19	2	10	33	1	S	3
Libra	α Libræ	14	44	24	15	33	17	S	3
Scorpius	Antares	16	22	14	26	10	16	S	4
Sagittarius	σ Sagittarii	18	47	59	26	26	26	S	4
Capricornus	α^2 Capricorni	20	11	34	12	54	24	S	4
Aquarius	α Aquarii	21	59	46	0	53	16	S	1
Pisces	~~Fomalhaut~~	22	51	11	30	14	32	S	1

S


359
300
200
100
50
0
1st Magn.
2nd
3rd
4th
5th
Nebula
Telescopic

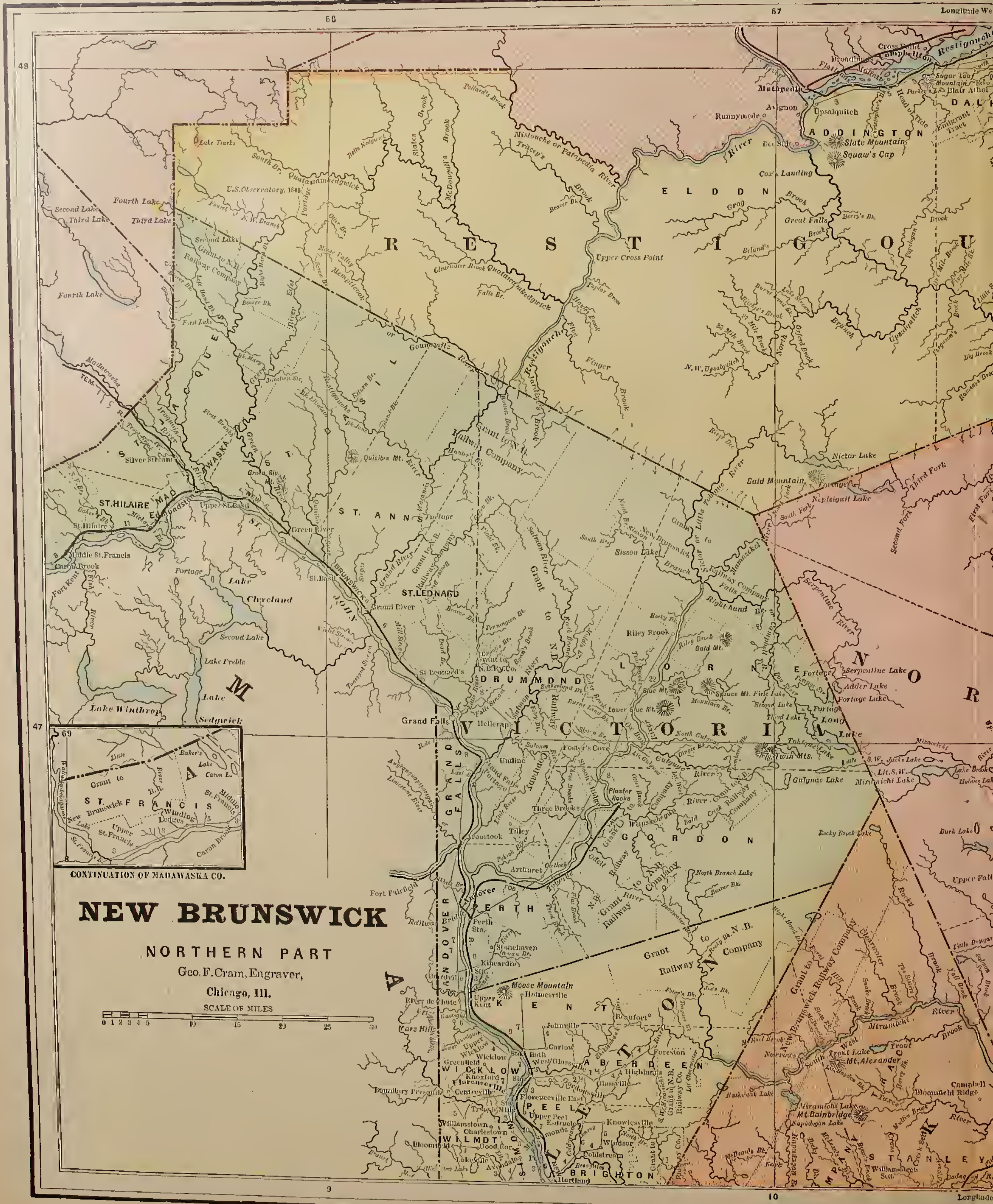
The maps are drawn on the gnomonic projection; in Nos. 1, 2, 3 and 4, the plan of projection is taken *parallel* to the axis of the earth; in Nos. 5 and 6 it is taken *perpendicular* to the axis of the earth.

The centres of Maps 1 and 3 are respectively the first points of Aries and Libra, and the centres of Maps 2 and 4 are respectively the points mid-way between these two points on the equator; in Maps 5 and 6 the centres are of course the north pole and south pole respectively.

In Maps 1, 2, 3 and 4, the meridians are projected into parallel straight lines, and the parallels of declination are portions of hyperbolas; in Maps 5 and 6 the meridians are projected into straight lines radiating from the pole, whilst the parallels of declination are projected into concentric circles.

By this projection all stars which lie on the same great circle in the heavens are in the same straight line on the maps.

The maps include all the larger stars and nearly all those which can be seen by the naked eye: their magnitudes are indicated by the number of petals of the asterisk: a star of the first magnitude has eight petals, a star of the second magnitude seven petals, and so on.



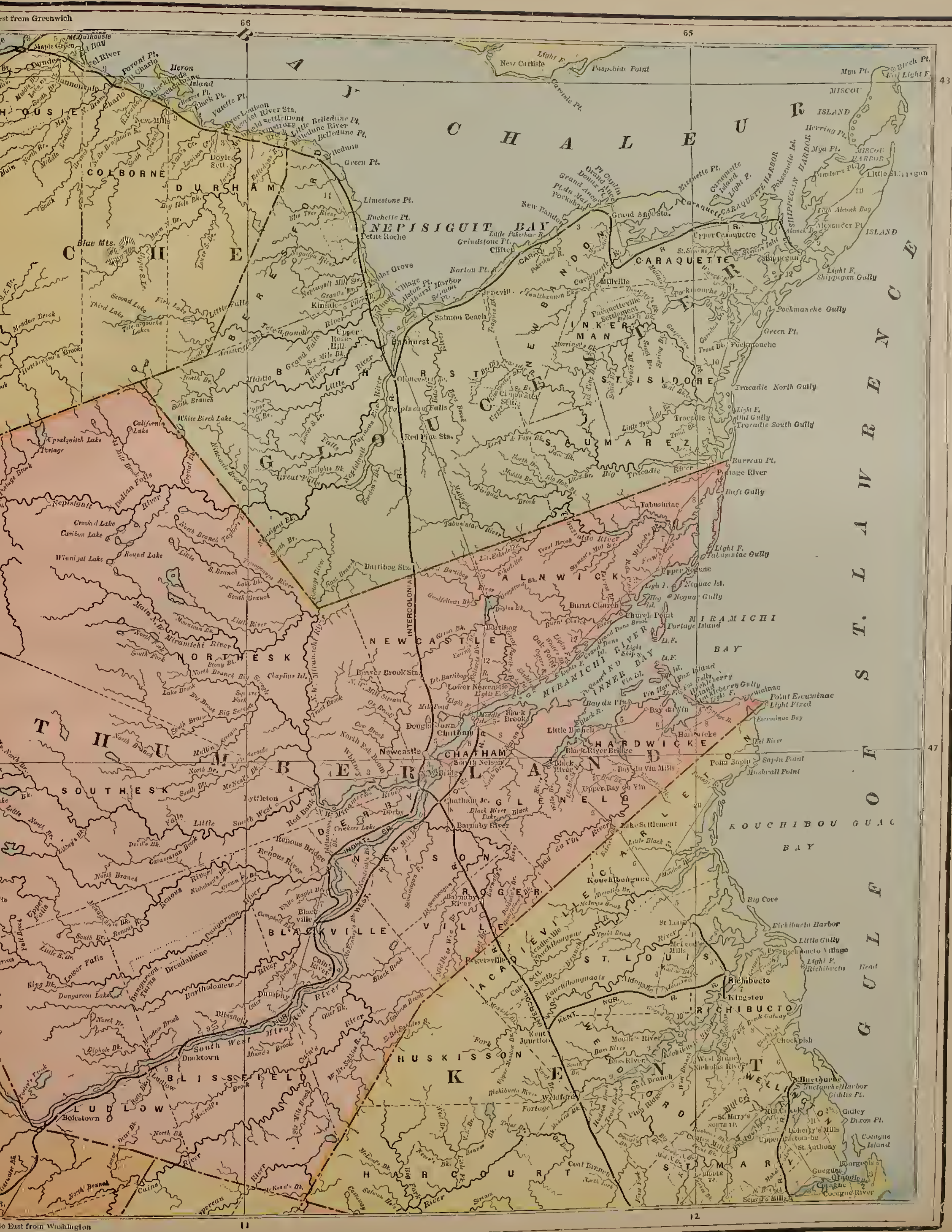
NEW BRUNSWICK

NORTHERN PART

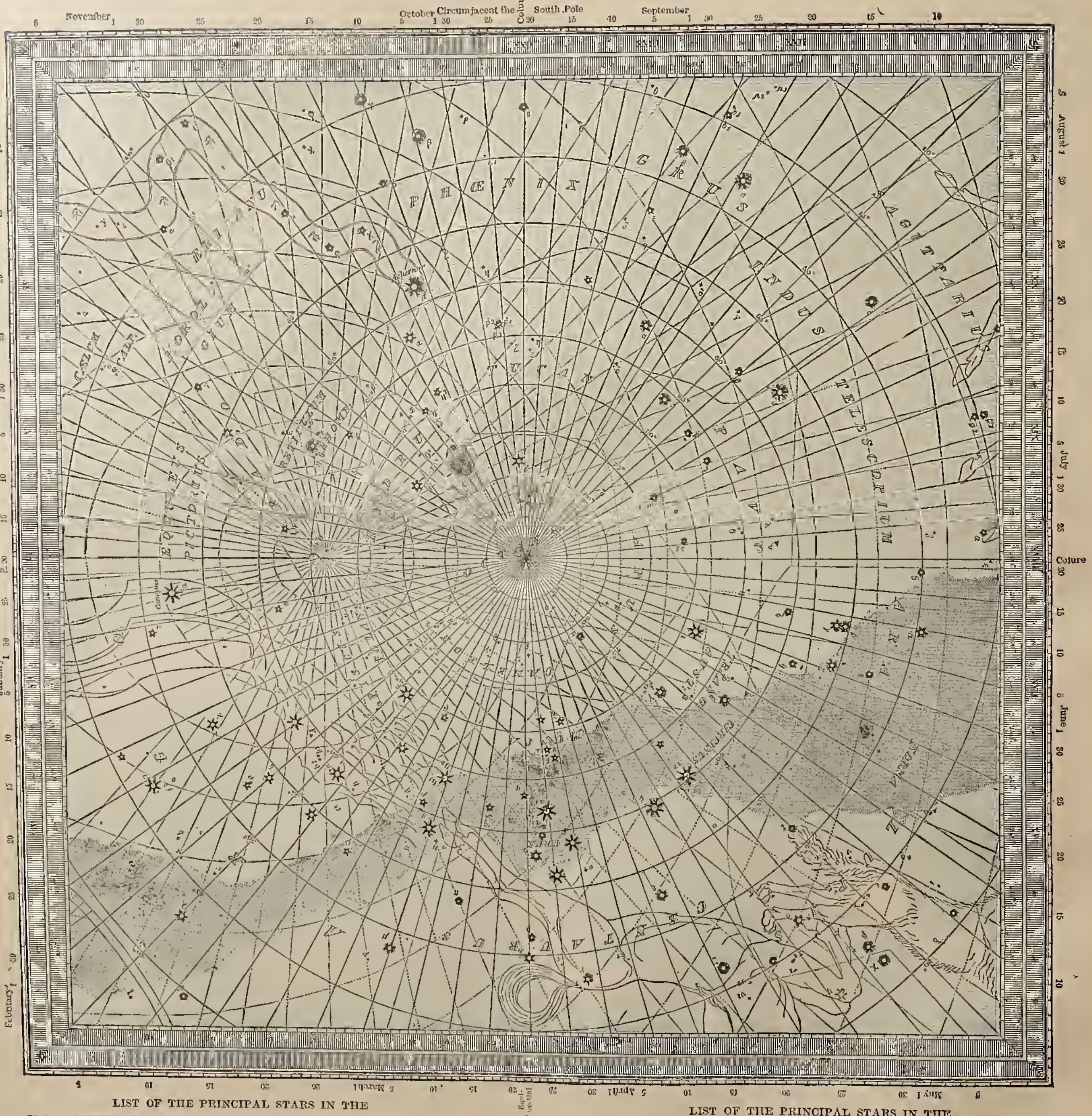
Geo. F. Cram, Engraver,
Chicago, Ill.

SCALE OF MILES

0 1 2 3 4 5 10 15 20 25 30
Longitude West
68
67
48
47
9
10
CONTINUATION OF MADAWASKA CO.
RESTIGOUCHE
MADAWASKA
VICTORIA
CARLETON
NORTHUMBERLAND
ADDINGTON
ELDON
DALHOUSIE
ST. FRANCIS
ST. JACQUES
ST. HILAIRE
MADAWASKA
ST. BASIL
ST. ANNS
ST. LEONARD
DRUMMOND
LORNE
GRAND FALLS
GORDON
PERTH
ANDOVER
KENT
ABERDEEN
WICKLOW
PEEL
WILMOT
SIMONDS
BRIGHTON
STANLEY
Campbellton
Matapedia
Restigouche
Upsalquitch
Slate Mountains
Squaw's Cap
Runnymede
Avignon
Cross Point
Sugar Loaf Mountain
Cox's Landing
Great Falls
Upper Cross Point
Bald Mountain
Nictau Lake
Nepisiguit Lake
Edmundston
Upper St. Basil
St. Hilaire
Middle St. Francis
Caron Brook
Fort Kent
Green River
St. Basil
Grand River
St. Leonard's
Grand Falls
Lake Cleveland
Second Lake
Lake Preble
Long Lake
Lake Winthrop
Sedgwick
Quisibis Mt.
Sisson Lake
Riley Brook
Bald Mt.
Blue Mt.
Spruce Mt.
Serpentine Lake
Adder Lake
Portage Lake
Twin Mts.
Gulquac Lake
Plaster Rocks
Three Brooks
Tilley
Arthurette
Undine
Aroostook
Fort Fairfield
Perth Sta.
Kincardine
Stonehaven
Bairdville
Moose Mountain
Holmesville
Upper Kent
River de Chute
Florenceville
Centreville
Bath
Carlow
Johnville
Beaufort
Foreston
Glassville
Knowlesville
Windsor
Coldstream
Hartland
Williamstown
Charleston
Bloomfield
Avondale
Mt. Alexander
Trout Lake
Mt. Bainbridge
Miramichi Lake
Campbell
Bloomfield Ridge
Williamsburgh Settlt.
Grant to New Brunswick Railway Company
Grant to N.B. Railway Company
LXX


st from Greenwich
66
65
43
47
BAY CHALEUR
NEPISIGUIT BAY
MISCOU ISLAND
Miscou Harbor
SHIPPEGAN ISLAND
Shippegan Harbor
Caraquette Harbor
GULF OF ST. LAWRENCE
MIRAMICHI BAY
INNER BAY
KOUCHIBOUGUAC BAY
DALHOUSIE
COLBORNE
DURHAM
RESTIGOUCHE
BERESFORD
BATHURST
GLOUCESTER
NEW BANDON
CARAQUETTE
INKERMAN
ST. ISIDORE
SAUMAREZ
ALNWICK
NEWCASTLE
NORTHESK
SOUTHESK
NORTHUMBERLAND
HARDWICKE
GLENELG
DERBY
NELSON
ROGERSVILLE
BLACKVILLE
BLISSFIELD
LUDLOW
ACADIEVILLE
CARLETON
ST. LOUIS
RICHIBUCTO
WELDFORD
HUSKISSON
KENT
WELLINGTON
HARCOURT
ST. MARY
Dalhousie
Bathurst
Chatham
Newcastle
Douglastown
Nelson
Derby
Blackville
Doaktown
Boiestown
Kent Junction
Richibucto
Kingston
Buctouche
Caraquette
Shippegan
Tracadie
Tabusintac
Neguac
Bartibog
Petite Roche
Belledune
Grand Anse Sta.
New Carlisle
Paspebiac Point
Point Escuminac Light Fixed
INTERCOLONIAL
Blue Mts.
12
11
e East from Washington

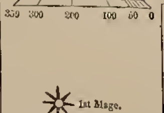
STAR MAP. No.6. SOUTH POLAR.

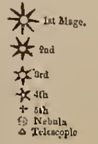

Circumjacent the South Pole
Colure
November
October
September
August
July
June
May
April
March
February
January
December
Solstitial
Colure
PHŒNIX
GRUS
INDUS
SAGITTARIUS
TELESCOPIUM
PAVO
ERIDANUS
HOROLOGIUM
PICTORIUS
CENTAURUS
NORMA
Canopus
Achernar

LIST OF THE PRINCIPAL STARS IN THE

CONSTELLATIONS ON THE NORTH SIDE OF THE EQUATOR.

CONSTELLATIONS.	NAMES OF STARS.	Right Ascension, Jan. 1, 1883.			Declination, Jan. 1, 1883			Map.
		H.	M.	S.	°	′	″	
Andromeda.........	Alpherat.	0	2	20	28	26	40	1
Cassiopeia	α Cassiopeiæ.	0	33	52	55	53	43	5
Ursa Minor.........	Polaris	1	15	50	88	41	6	5
Perseus	Algol....	3	15	58	49	26	36	5
Auriga	Capella	5	8	3	45	52	38	5
Canis Minor.........	Procyon	7	33	11	5	31	24	2
Ursa Major	α Ursæ Majoris	10	56	30	62	22	56	5
Canes Venatici....	α Canum Venaticorum..	12	50	33	38	57	2	3
Draco	α Draconis	14	1	13	64	56	7	5
Bootes..............	Arcturus..............	14	10	20	19	47	33	3
Corona Borealis .	Alpheta	15	29	44	27	6	33	4
Serpens	α Serpentis	15	38	30	6	47	40	4
Hercules	α Herculis..............	17	9	19	14	31	29	4
Draco	γ Draconis	17	53	53	51	30	10	5
Lyra........	Vega	18	32	59	38	40	31	4
Aquila..	Altair..................	19	45	5	8	33	37	4
Delphinus....	α Delphini	20	34	13	15	29	58	4
Cygnus	Deneb	20	37	27	44	51	46	5
Cepheus	α Cephei	21	15	47	62	5	23	5
Pegasus	Markab.	22	58	56	14	34	34	1

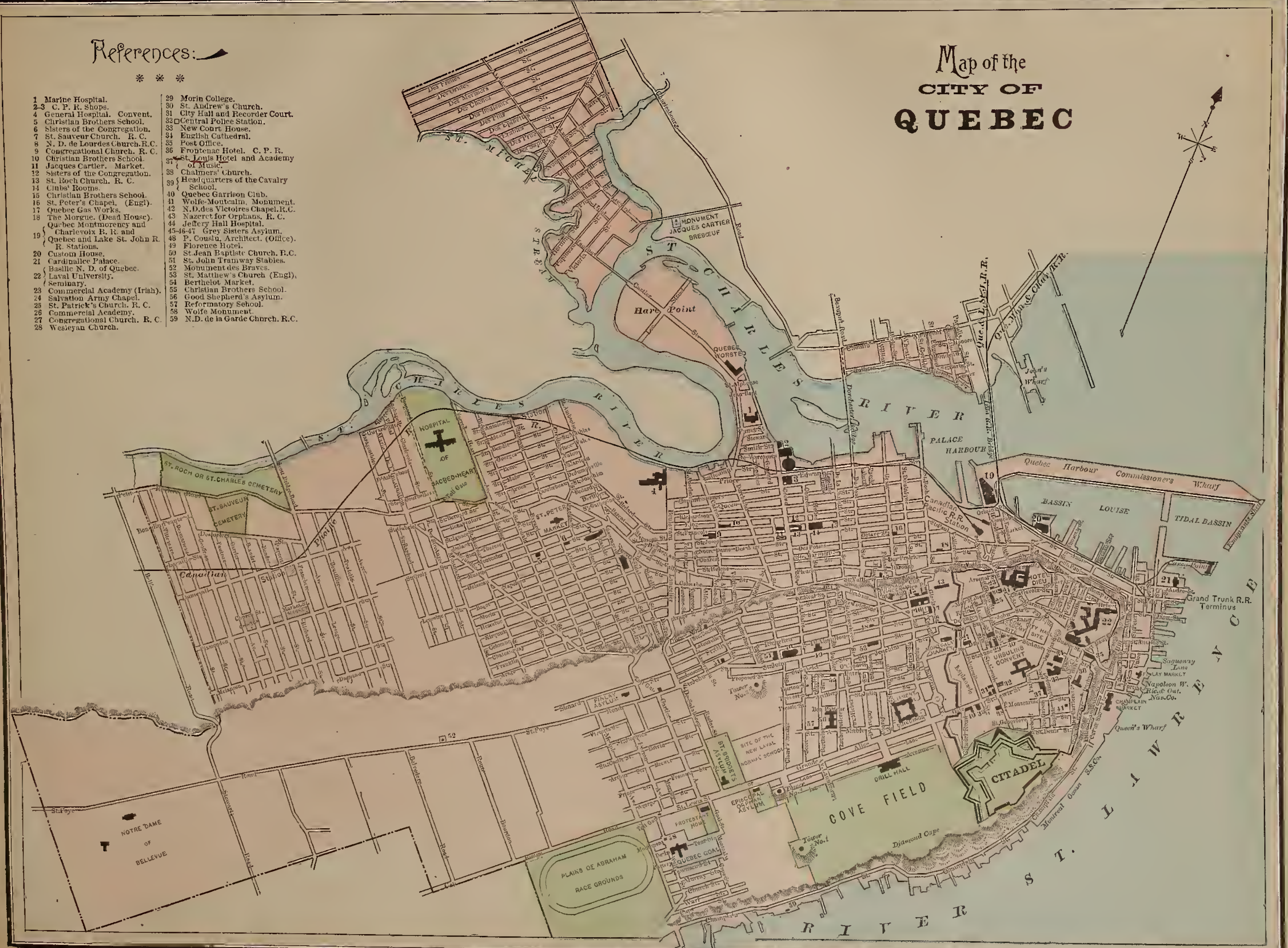

Equi-noctial
359
300
200
100
50
0


1st Mage.
2nd
3rd
4th
5th
Nebula
Telescopic

LIST OF THE PRINCIPAL STARS IN THE

CONSTELLATIONS ON THE SOUTH SIDE OF THE EQUATOR.

CONSTELLATIONS.	NAMES OF STARS.	Right Ascension, Jan. 1, 1883.			Declination, Jan. 1, 1883.			Map.
		H.	M.	S.	°	′	″	
Eridanus	Achernar	1	33	21	57	49	53	6
Orion	Rigel	5	8	55	8	20	17	2
Lepus	α Leporis................	5	27	34	17	54	26	2
Columba Noachi ...	α Columbæ.	5	35	25	34	8	15	2
Argo......	Canopus	6	21	21	52	37	56	6
Canis Major.........	Sirius	6	40	0	16	33	24	2
Hydra	α Hydræ................	9	21	50	8	9	8	3
Crater	ζ Crateris	11	18	29	14	8	44	3
Crux...	α Crucis	12	20	6	62	27	1	6
Corvus...............	β Corvi..................	12	28	14	22	44	59	3
Centaurus	α² Centauri	14	31	39	60	21	14	6
Triangulum Australe.	α Trianguli Australis....	16	36	17	68	48	37	6
Pavo................	α Pavonis	20	16	23	57	6	29	6
Grus	α Gruis................	22	0	51	47	31	37	6

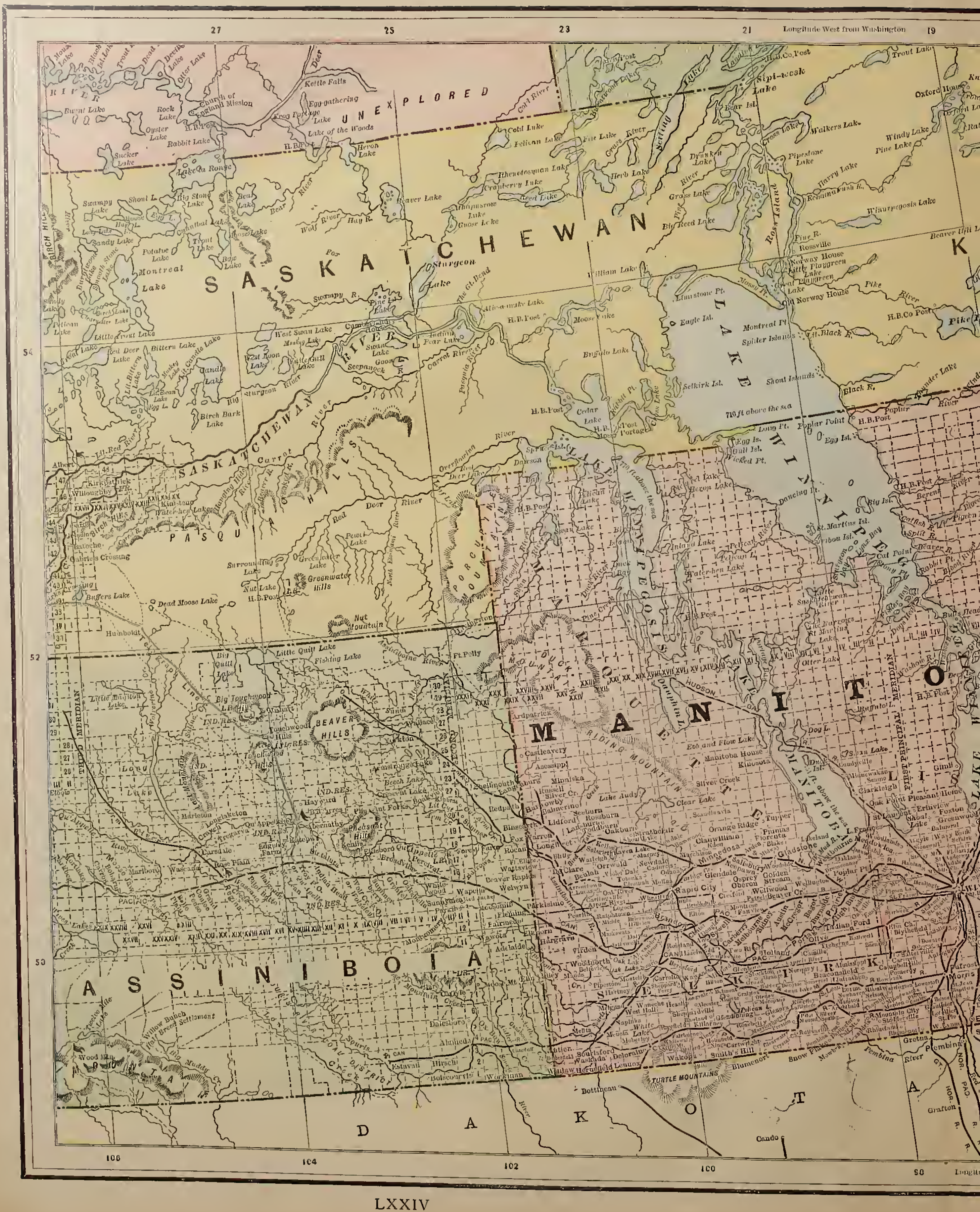

ST. CHARLES RIVER
ST. LAWRENCE RIVER
ST. MICHAEL STREAM
Hare Point
PALACE HARBOUR
Quebec Harbour Commissioners Wharf
BASSIN LOUISE
TIDAL BASSIN
Grand Trunk R.R. Terminus
CITADEL
COVE FIELD
DRILL HALL
PLAINS OF ABRAHAM RACE GROUNDS
QUEBEC GOAL
ST. BRIDGET'S ASYLUM
FINLAY ASYLUM
URSULINE CONVENT
HOTEL DIEU
HOSPITAL OF SACRED HEART
ST. ROCH OR ST. CHARLES CEMETERY
ST. SAUVEUR CEMETERY
NOTRE DAME OF BELLEVUE
MONUMENT JACQUES CARTIER BREBŒUF
Canadian Pacific R.R. Station
Dorchester Bridge
Beauport Road
St. Foye Road
Diamond Cape
Tower No. 1
Queen's Wharf
CHAMPLAIN MARKET
Saguenay Line

Map of the CITY OF QUEBEC

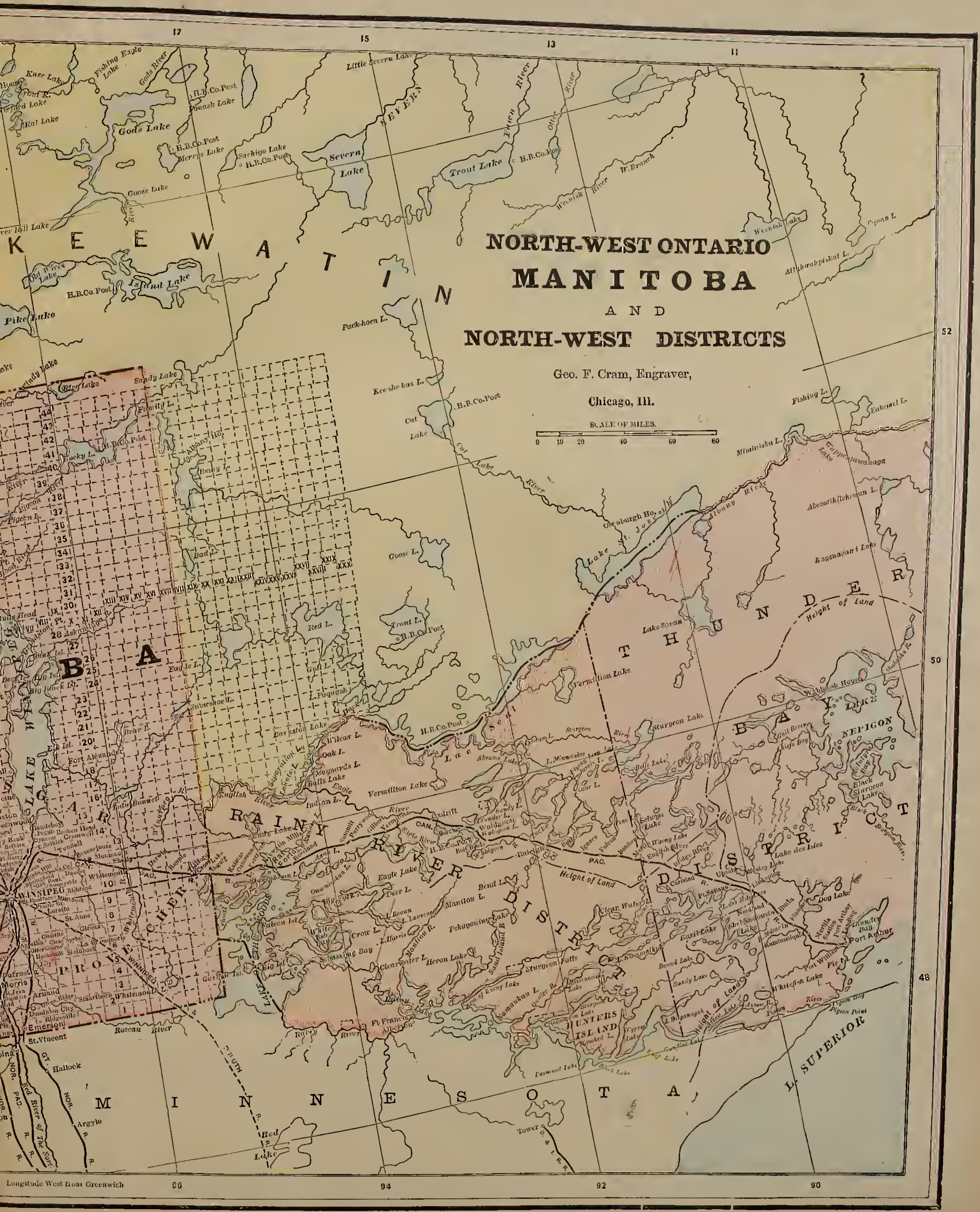
References:

* * *

1	Marine Hospital.
2-3	C. P. R. Shops.
4	General Hospital. Convent.
5	Christian Brothers School.
6	Sisters of the Congregation.
7	St. Sauveur Church. R. C.
8	N. D. de Lourdes Church. R.C.
9	Congregational Church. R. C.
10	Christian Brothers School.
11	Jacques Cartier. Market.
12	Sisters of the Congregation.
13	St. Roch Church. R. C.
14	Clubs' Rooms.
15	Christian Brothers School.
16	St. Peter's Chapel. (Engl).
17	Quebec Gas Works.
18	The Morgue. (Dead House).
19	Quebec Montmorency and Charlevoix R. R. and Quebec and Lake St. John R. R. Stations.
20	Custom House.
21	Cardinalice Palace.
22	Basilic N. D. of Quebec. Laval University. Seminary.
23	Commercial Academy (Irish).
24	Salvation Army Chapel.
25	St. Patrick's Church. R. C.
26	Commercial Academy.
27	Congregational Church. R. C.
28	Wesleyan Church.
29	Morin College.
30	St. Andrew's Church.
31	City Hall and Recorder Court.
32 □	Central Police Station.
33	New Court House.
34	English Cathedral.
35	Post Office.
36	Frontenac Hotel. C. P. R.
37	St. Louis Hotel and Academy of Music.
38	Chalmers' Church.
39	Headquarters of the Cavalry School.
40	Quebec Garrison Club.
41	Wolfe-Moutcalm. Monument.
42	N.D. des Victoires Chapel. R.C.
43	Nazeret for Orphans. R. C.
44	Jeffery Hall Hospital.
45-46-47	Grey Sisters Asylum.
48	P. Cousin. Architect. (Office).
49	Florence Hotel.
50	St. Jean Baptiste Church. R.C.
51	St. John Tramway Stables.
52	Monument des Braves.
53	St. Matthew's Church (Engl).
54	Berthelot Market.
55	Christian Brothers School.
56	Good Shepherd's Asylum.
57	Reformatory School.
58	Wolfe Monument.
59	N.D. de la Garde Church. R.C.


Longitude West from Washington
27
25
23
21
19
UNEXPLORED
SASKATCHEWAN
SASKATCHEWAN RIVER
PASQUIA HILLS
PORCUPINE MOUNTAIN
DUCK MOUNTAIN
RIDING MOUNTAIN
BEAVER HILLS
TURTLE MOUNTAINS
MANITOBA
ASSINIBOIA
DAKOTA
LAKE WINNIPEG
LAKE WINNIPEGOSIS
LAKE MANITOBA
Cedar Lake
Moose Lake
Montreal Lake
Lake la Ronge
Sturgeon Lake
Dauphin L.
Norway House
Ft. Pelly
Humboldt
Batoche
Qu'Appelle
Regina
Moose Jaw
Brandon
Rapid City
Minnedosa
Portage la Prairie
Virden
Deloraine
Emerson
Pembina
Grafton
Bottineau
Cando
THIRD MERIDIAN
FIRST PRINCIPAL MERIDIAN
CAN. PAC.
54
52
50
106
104
102
100
98

LXXIV

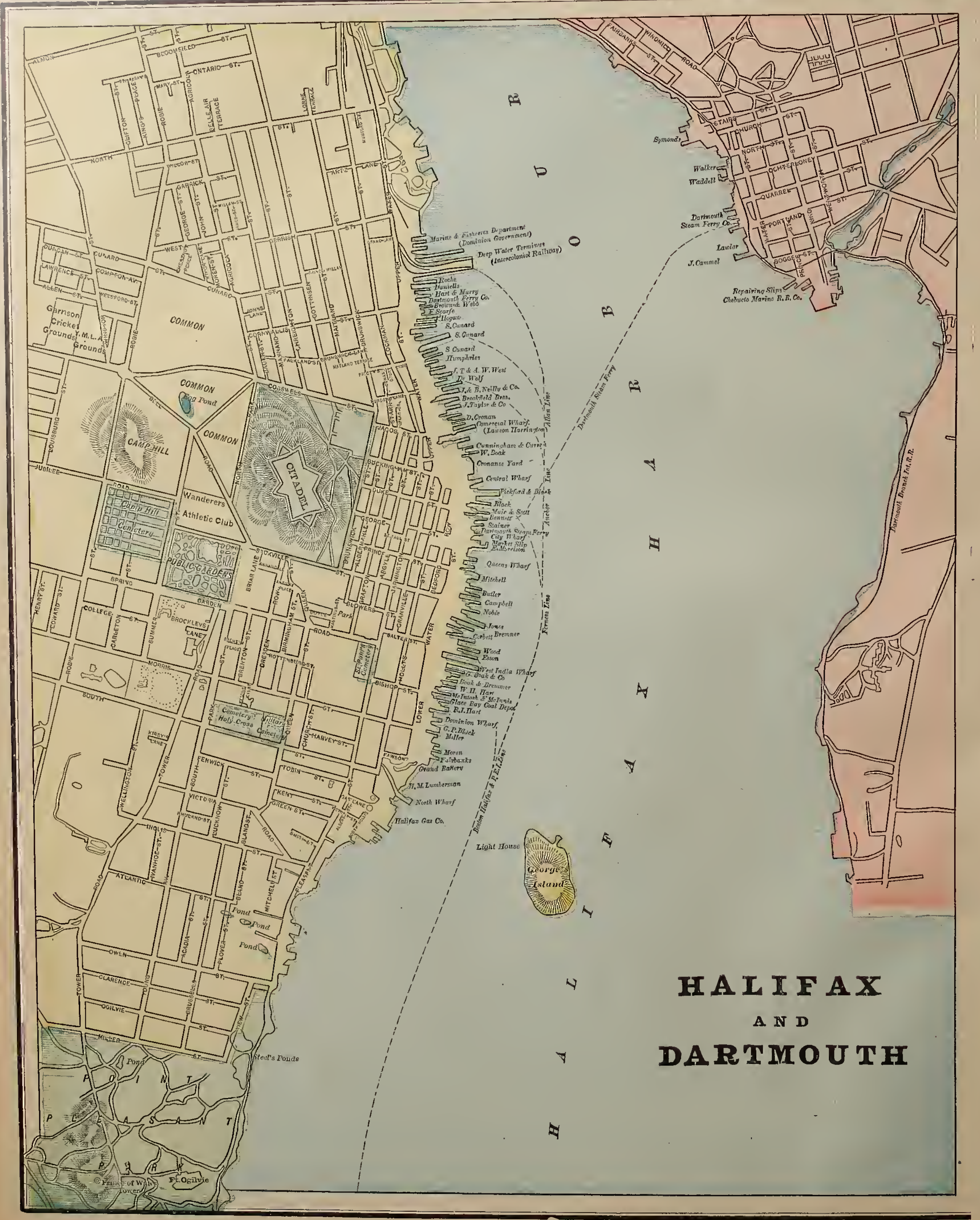


NORTH-WEST ONTARIO
MANITOBA
AND
NORTH-WEST DISTRICTS

Geo. F. Cram, Engraver,

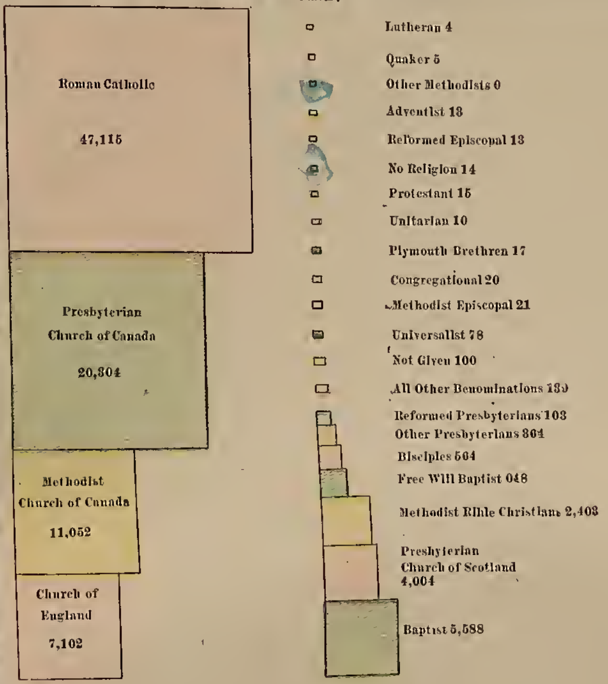
Chicago, Ill.

SCALE OF MILES.
0 10 20 40 60 80
17
15
13
11
52
50
48
Longitude West from Greenwich
96
94
92
90
K E E W A T I N
B A
L A K E
P R O V E N C H E R
R A I N Y R I V E R D I S T R I C T
T H U N D E R B A Y D I S T R I C T
M I N N E S O T A
L. SUPERIOR
LAKE NEPIGON
Knee Lake
Fishing Eagle Lake
Gods River
H.B.Co.Post
Oxford Lake
Rat Lake
Gods Lake
Sachigo Lake
Little Severn Lake
SEVERN
Severn Lake
Trout Lake
Otter River
W. Branch
Weenisk River
Weenisk Lake
Attawapiskat L.
Goose Lake
Island Lake
Pike Lake
Pack-hoen L.
Kee-she-kas L.
Cat Lake
Cat Lake River
Sandy Lake
Family L.
Albany Ho.
Albany R.
Osnaburgh Ho.
Lake St. Joseph
Albany River
Fishing L.
Miminiska L.
Abezotikitchwan L.
Goose L.
Red L.
Trout L.
Lake Soran
Height of Land
Vermillion Lake
Sturgeon Lake
Lac Seul
Gull L.
L. Puquash
Eagle L.
Berens River
Pigeon R.
Bull Head
Big Black Isl.
Fort Alexander
Wilcox L.
Oak L.
Maynards L.
Bulls Lake
Indian L.
English River
Minnitaki L.
Abram Lake
Wabigoon L.
Dog Lake
Black Sturgeon Lake
Nipigon Bay
Thunder Bay
Port Arthur
Fort William
Pie I.
Whitefish Lake
Pigeon River
Pigeon Point
Pigeon Bay
Lake des Isles
Eagle Lake
Manitou L.
Pekagoning Lake
Heron Lake
Clearwater L.
Sturgeon Falls
Seine R.
Lake of the Woods
Rat Portage
Falcon Isl.
Sebaskong Bay
Rainy Lake
Ft. Frances
Alberton
Rainy River
Namakan L.
Hunters Island
Basswood Lake
Saganagah L.
Gunflint Lake
CAN. PAC.
WINNIPEG
St. Boniface
Selkirk
Whitemouth
St. Anne
Morris
Emerson
St. Vincent
Dominion City
Roseau River
Hallock
Argyle
Red River of the North
GT. NOR. R.R.
NOR. PAC. R.R.
DULUTH
Red Lake
Tower
D. & I. R. R.

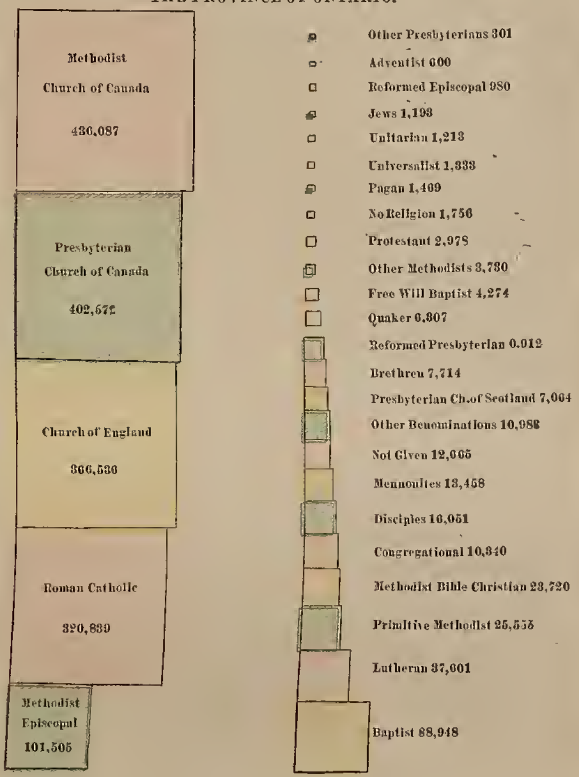

HALIFAX HARBOUR
Marine & Fisheries Department (Dominion Government)
Deep Water Terminus (Intercolonial Railway)
Dartmouth Steam Ferry
Allan Line
Anchor Line
Furness Line
Boston Halifax & P. E. I. Line
CITADEL
CAMP HILL
COMMON
Egg Pond
Wanderers Athletic Club
Camp Hill Cemetery
PUBLIC GARDENS
Garrison Cricket Grounds
Y. M. L. A. Grounds
St. Paul's Cemetery
Cemetery Holy Cross
Military Cemetery
Queens Wharf
Central Wharf
Cronans Yard
Commercial Wharf (Lawson Harrington)
City Wharf
Market Slip
West India Wharf
Dominion Wharf
Glace Bay Coal Depot
Grand Battery
H. M. Lumberman
North Wharf
Halifax Gas Co.
Light House
George's Island
Steel's Ponds
POINT PLEASANT PARK
Prince of Wales Tower
Ft. Ogilvie
Symonds
Walker
Waddell
Dartmouth Steam Ferry Co.
Lawlor
J. Cammel
Repairing Slips
Chebucto Marine R. R. Co.
Dartmouth Branch Int. R. R.
WINDMILL ROAD
FAIRBANKS ST.
CHURCH ST.
NORTH ST.
OCHTERLONEY ST.
QUARREL ST.
PORTLAND ST.
WATER ST.
BOGGS ST.
PRINCE ST.
KING ST.
WENTWORTH ST.
NORTH ST.
ROBIE ST.
AGRICOLA ST.
GOTTINGEN ST.
BRUNSWICK ST.
BARRINGTON ST.
HOLLIS ST.
UPPER WATER ST.
LOWER WATER ST.
SPRING GARDEN ROAD
SACKVILLE ST.
JUBILEE ROAD
MORRIS ST.
SOUTH ST.
INGLIS ST.
ATLANTIC ST.
TOWER ROAD
YOUNG AVE.
PLEASANT ST.

HALIFAX
AND
DARTMOUTH

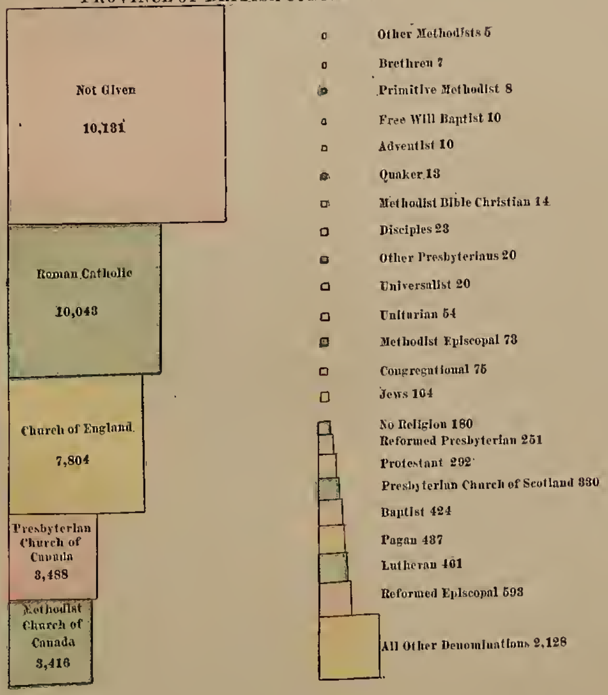
COMPARISONS OF THE RELIGIONS OF THE PROVINCE OF PRINCE EDWARD ISLAND.



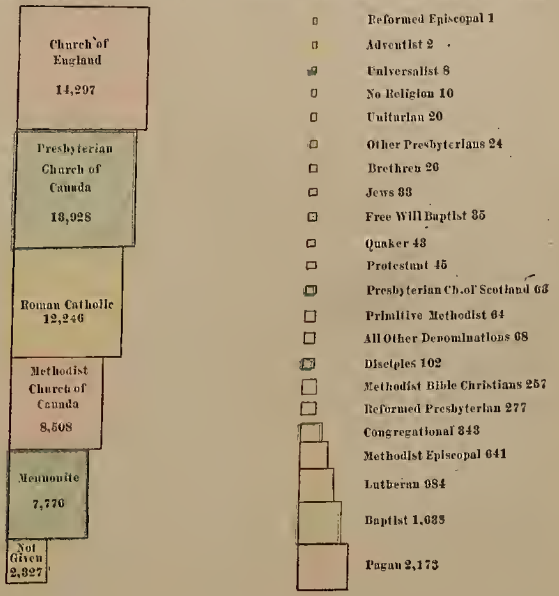
COMPARISON OF THE RELIGIOUS CREEDS OF THE PROVINCE OF ONTARIO.

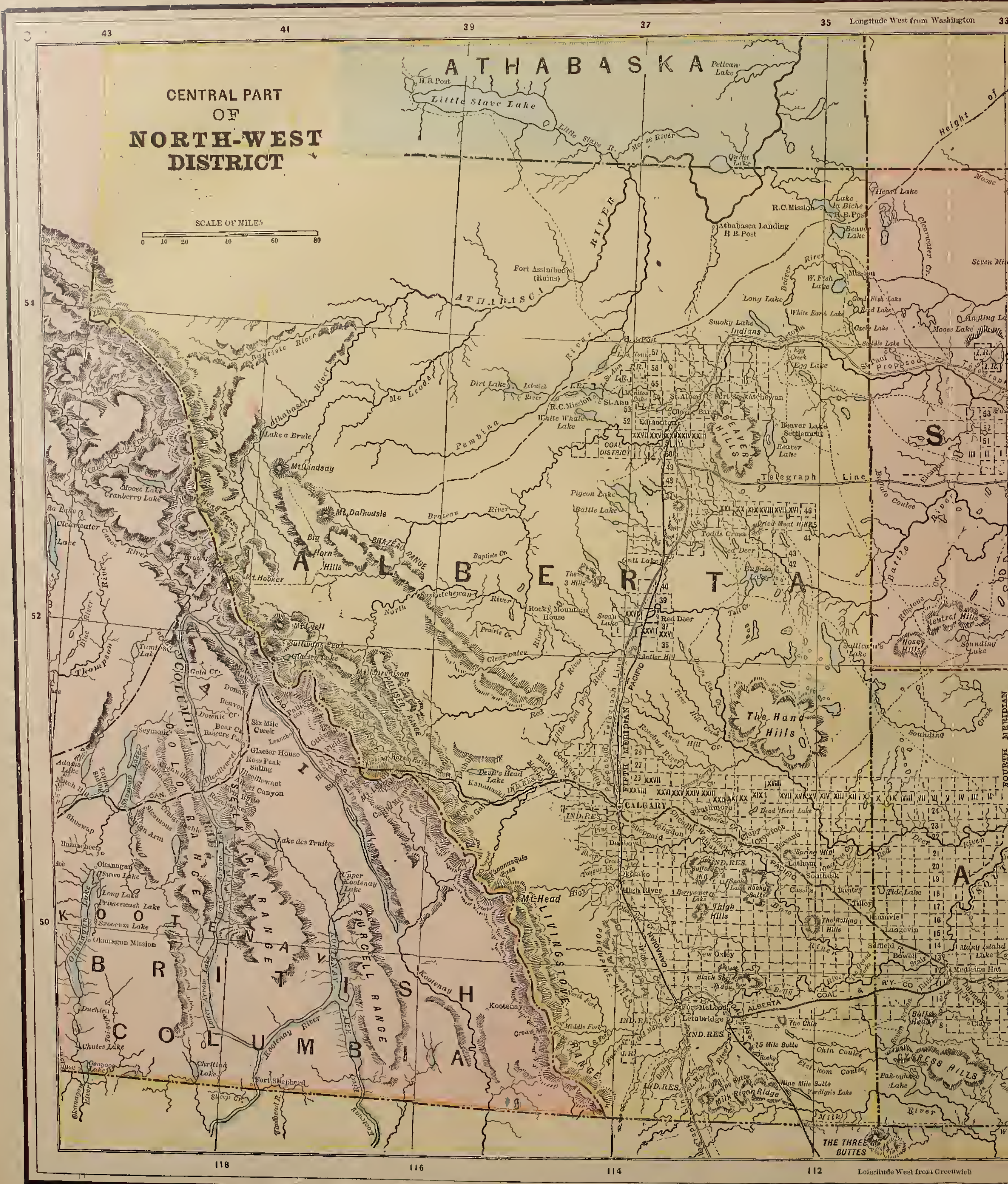


COMPARISON OF THE RELIGIONS OF THE PROVINCE OF BRITISH COLUMBIA.



COMPARISON OF THE RELIGIONS IN THE PROVINCE OF MANITOBA.

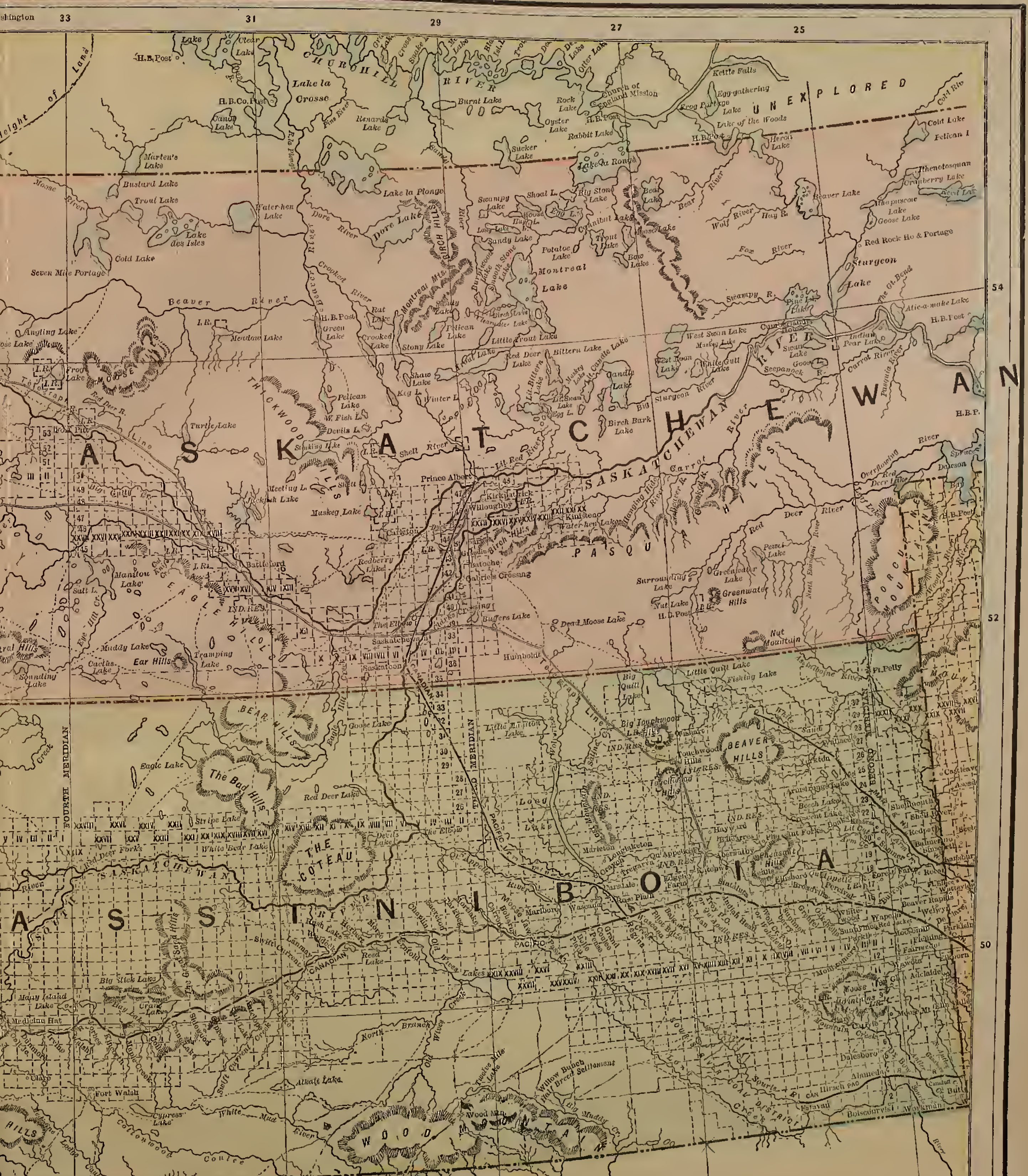




CENTRAL PART OF NORTH-WEST DISTRICT

SCALE OF MILES

Longitude West from Washington
43
41
39
37
35
Longitude West from Greenwich
118
116
114
112
54
52
50
0 10 20 40 60 80
ATHABASKA
Little Slave Lake
H. B. Post
Pelican Lake
Little Slave R.
Moose River
Athabasca Landing H. B. Post
R.C.Mission
Lake la Biche
Heart Lake
Beaver Lake
Fort Assiniboine (Ruins)
ATHABASCA
RIVER
Long Lake
Smoky Lake Indians
Baptiste River
Athabasca River
Mc Leods
Dirt Lake
Pembina
White Whale Lake
St. Ann
St. Albert
Edmonton
Fort Saskatchewan
BEAVER HILLS
Beaver Lake Settlement
COAL DISTRICT
Telegraph Line
Lake a Brule
Mt. Lindsay
Mt. Dalhousie
Brazeau River
BRAZEAU RANGE
Big Horn Hills
Pigeon Lake
Battle Lake
Dried Meat Hill
Todds Cross
Red Deer
Gull Lake
ALBERTA
The 3 Hills
Rocky Mountain House
Swan Lake
Red Deer
Antler Hill
North Saskatchewan River
Clearwater
Mt. Hooker
Mt. Brown
Head Pass
Moose Lake
Cranberry Lake
Canoe River
Clearwater Lake
Thompson
Mt. Lyell
Sullivans Peak
Glacier Lake
Mt. Murchison
PALLISER RANGE
Red Deer River
The Hand Hills
Knee Hill Cr.
Rosebud River
Sullivan's Lake
Nose Hills
Neutral Hills
Sounding Lake
Battle River
Ribstone Cr.
Sounding Creek
FOURTH MERIDIAN
FIFTH MERIDIAN
PACIFIC
Devil's Head Lake
Kananaski
IND. RES.
CALGARY
Strathmore
Dead Horse Lake
Gleichen
Crowfoot
Bassano
Spring Hill
Langevin
Southesk
Cassils
Tilley
Bantry
Tide Lake
Medicine Hat
Many Island Lake
Bullshead
Cypress Hills
Pakowki Lake
Okotoks
High River
Tongue Cr.
Sheep Cr.
Mosquito Cr.
Blackfoot
The Rolling Hills
Thigh Hills
Bow
New Oxley
Black Spring Ridge
Fort McLeod
Lethbridge
ALBERTA R'Y & COAL CO.
The Chin
Chin Coulee
15 Mile Butte
Nine Mile Butte
Verdigris Lake
Milk River Ridge
Milk River
THE THREE BUTTES
St. Marys River
Belly River
Waterton
PORCUPINE HILLS
LIVINGSTONE RANGE
Kananasquis Pass
Mt. Head
Crows Nest
North Fork
Middle Fork
South Fork
Kootenay
Kootenay R.
Fort Shepherd
PURCELL RANGE
KOOTENAY LAKE
Kootenay River
Upper Kootenay Lake
Lake des Truites
Lower Arrow Lake
Upper Arrow Lake
GOLD RANGE
SELKIRK RANGE
COLUMBIA
Glacier House
Ross Peak Siding
Illecillewaet
Albert Canyon
Revelstoke
Six Mile Creek
Beaver
Donald
Golden
Gold Cr.
Tumtum Lake
Blue River
Seymour
Shuswap Lake
Sicamous
Adams Lake
Okanagan Lake
Swan Lake
Long Lake
Okanagan Mission
Duck Lake
Chutes Lake
Osoyoos Lake
Christina Lake
Sheep Cr.
KOOTENAY
BRITISH COLUMBIA
Bow River
Saskatchewan
SA
CAN. PAC.



Washington
33
31
29
27
25
SASKATCHEWAN
ASSINIBOIA
CHURCHILL RIVER
UNEXPLORED
Height of Land
Lake la Crosse
H.B.Co. Post
Lake la Plonge
Dore Lake
Montreal Lake
Beaver River
Cold Lake
Seven Mile Portage
Green Lake
Big Stone Lake
Lac la Ronge
Red Rock Ho & Portage
Sturgeon Lake
Cumberland House
Cumberland Lake
Pine I. Lake
Moose Lake
Candle Lake
Birch Bark Lake
Thickwood Hills
Shell River
Prince Albert
Kirkpatrick
Willoughby
Kinistino
Carlton
Battleford
Batoche
Gabriel's Crossing
Duck Lake
Eagle Hills
Saskatoon
Clarks Crossing
Buffers Lake
Dead Moose Lake
Humboldt
Ear Hills
Tramping Lake
Muddy Lake
Sounding Lake
Manitou Lake
Pasquia Hills
Porcupine Mountain
Greenwater Lake
Greenwater Hills
Nut Lake
Nut Mountain
The Pas
Little Quill Lake
Fishing Lake
Big Quill Lake
Fort Pelly
Big Touchwood Hills
Touchwood Hills
Beaver Hills
Bear Hills
The Bad Hills
Eagle Lake
Goose Lake
Little Manitou Lake
Red Deer Lake
Stripe Lake
White Bear Lake
The Coteau
Devils Lake
The Elbow
Qu'Appelle
Fort Qu'Appelle
Moose Jaw
Regina
Pile of Bones
Balgonie
Broadview
Whitewood
Grenfell
Wolseley
Indian Head
Moosomin
Fleming
Moose Mountain
Alameda
Hirsch
Estevan
Coal District
Souris R.
Rush Lake
Swift Current
Maple Creek
Medicine Hat
Fort Walsh
Cypress Lake
Big Stick Lake
Many Island Lake
Crane Lake
Old Wives Lakes
Reed Lake
Alkali Lake
Willow Bunch
Half Breed Settlement
Wood Mountain
Wood Mt.
Big Muddy Cr.
White Mud River
Cottonwood Coulee
Wild Horse Lake
Cypress Hills
South Saskatchewan
Red Deer Forks
Canadian Pacific
Fourth Meridian
Third Meridian
Second Meridian
54
52
50
Greenwich
110
108
106
104
102

New
boundary

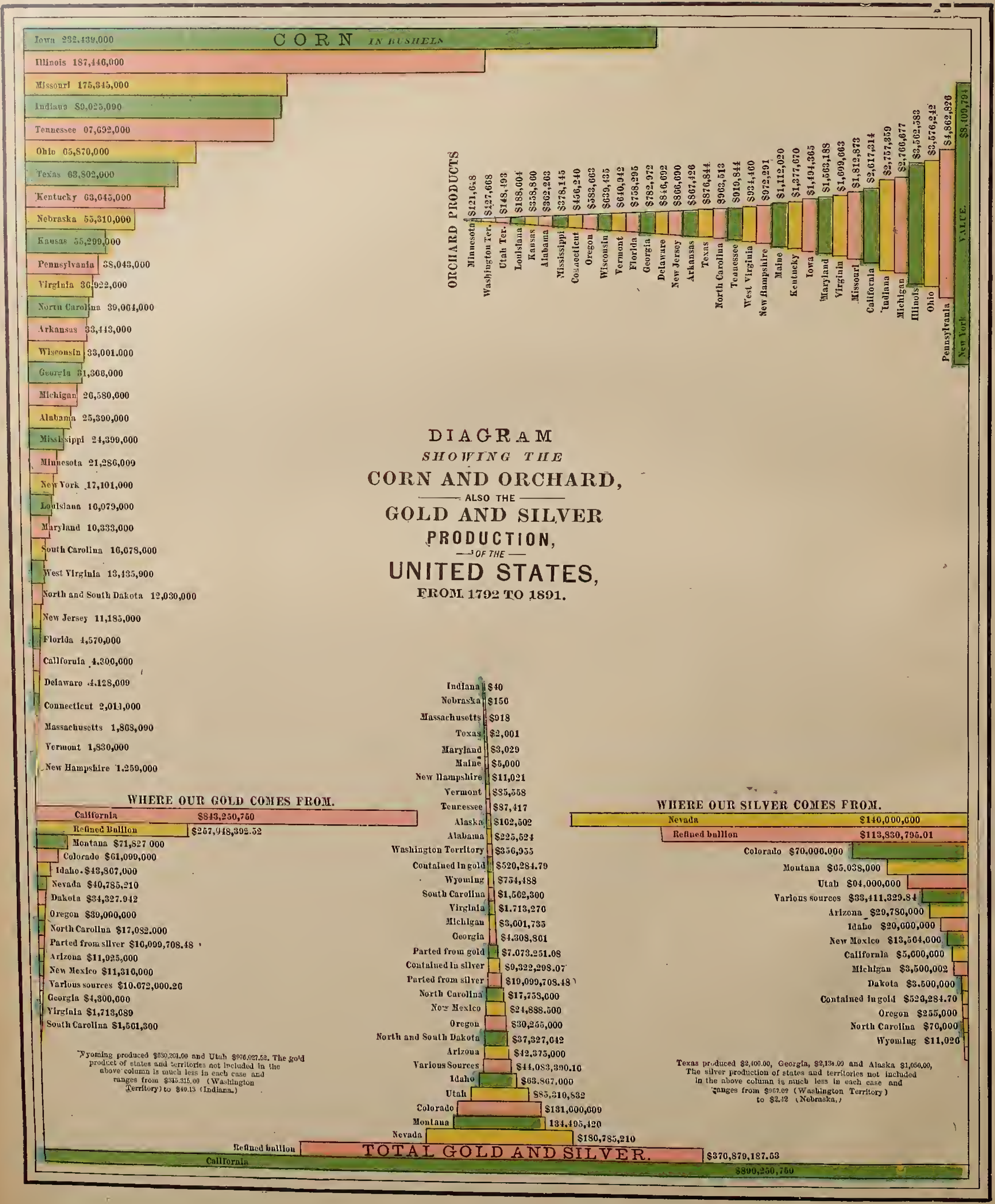
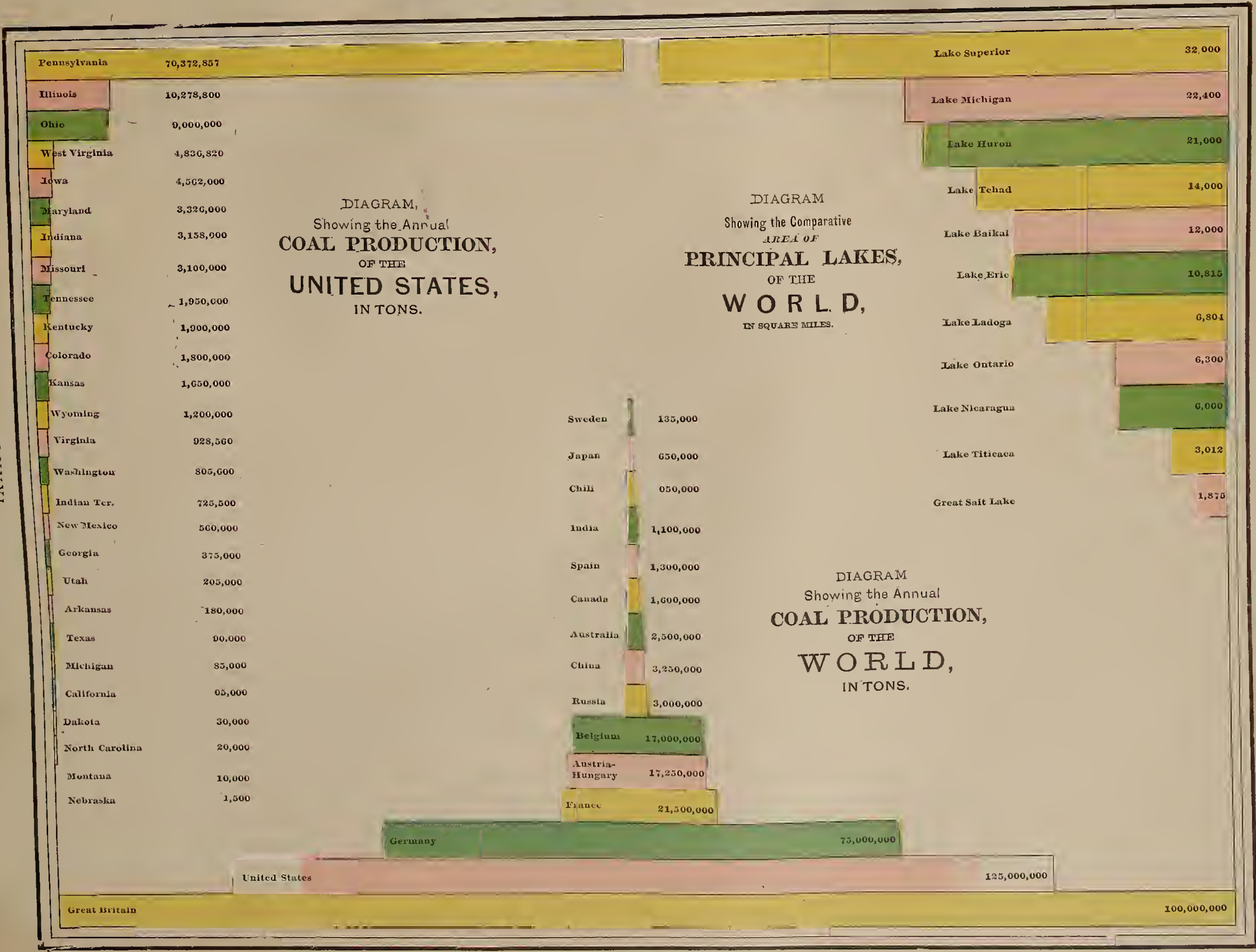


DIAGRAM
SHOWING THE
CORN AND ORCHARD,
ALSO THE
GOLD AND SILVER PRODUCTION,
OF THE
UNITED STATES,
FROM 1792 TO 1891.

Wyoming produced $639,201.00 and Utah $976,027.52. The gold product of states and territories not included in the above column is much less in each case and ranges from $315.315.00 (Washington Territory) to $40.13 (Indiana.)

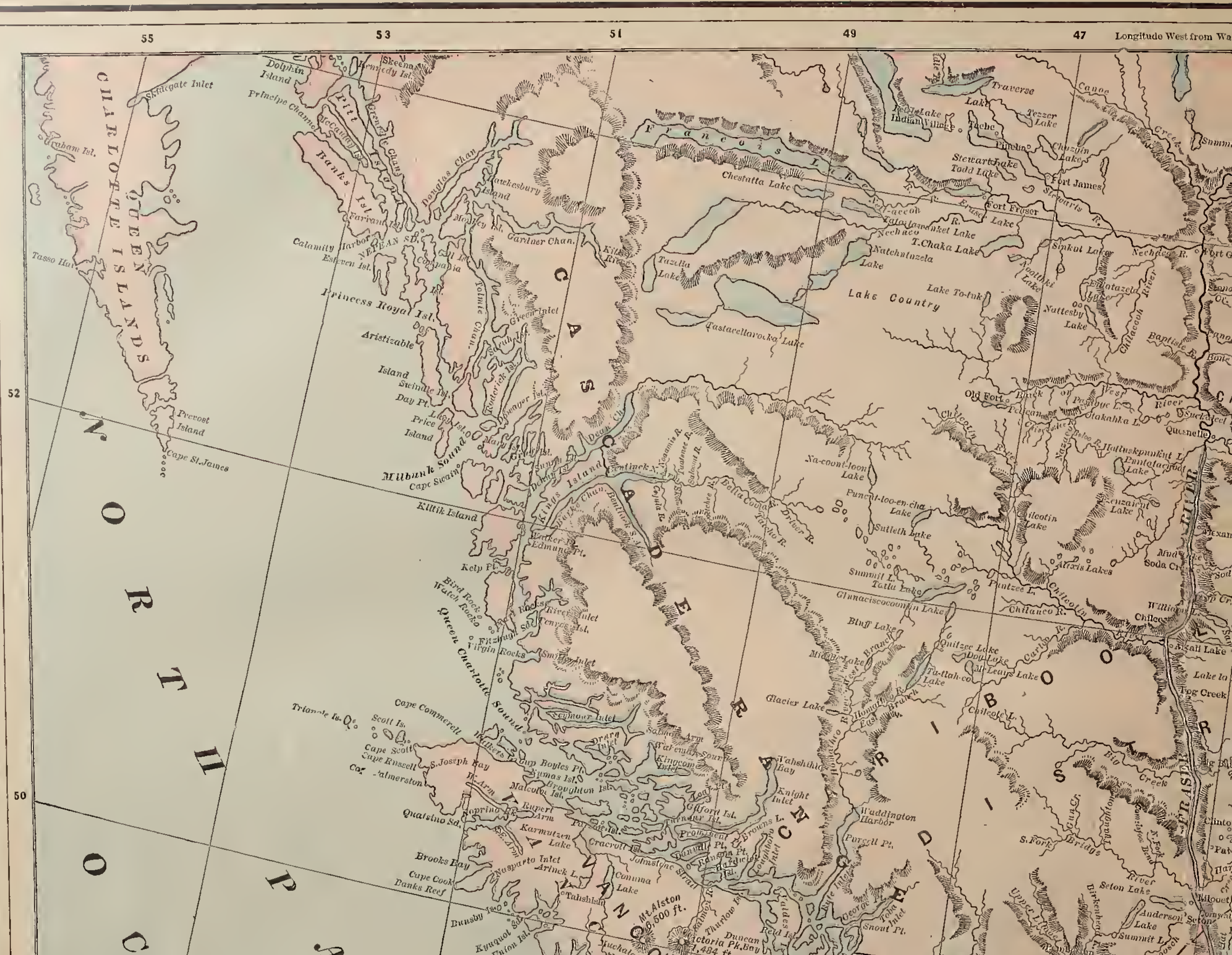
Texas produced $2,400.00, Georgia, $2,134.00 and Alaska $1,050.00, The silver production of states and territories not included in the above column is much less in each case and ranges from $967.02 (Washington Territory) to $2.42 (Nebraska.)



DIAGRAM,
Showing the Annual
COAL PRODUCTION,
OF THE
UNITED STATES,
IN TONS.

DIAGRAM
Showing the Comparative
AREA OF
PRINCIPAL LAKES,
OF THE
WORLD,
IN SQUARE MILES.

DIAGRAM
Showing the Annual
COAL PRODUCTION,
OF THE
WORLD,
IN TONS.


55
53
51
49
47
Longitude West from Wa
52
50
48
130
128
126
124
122
Longitude W
QUEEN CHARLOTTE ISLANDS
NORTH PACIFIC OCEAN
CASCADE RANGE
CARIBOO
VANCOUVER ISLAND
VANCOUVER DISTRICT
NEW WESTMINSTER DISTRICT
STRAIT OF GEORGIA
JUAN DE FUCA STRAIT
VICTORIA DIST.
WASHINGTON
Skidegate Inlet
Graham Isl.
Tasso Har.
Prevost Island
Cape St. James
Dolphin Island
Principe Chann.
Banks Isl.
Pitt Isl.
Princess Royal Isl.
Aristizable Island
Milbank Sound
Kiltik Island
Queen Charlotte Sound
Cape Scott
Scott Is.
Triangle Is.
Cape Commerell
Quatsino Sd.
Brooks Bay
Cape Cook
Nootka Isl.
Clayoquot Sd.
Barclay Sd.
Cape Beale
Cape Flattery
Mt. Alston 6,500 ft.
Victoria Pk.
Crown Mts. 6,082 ft.
Fort Fraser
Fort James
Stewart Lake
Francois Lake
Lake Country
Chilcotin R.
Quesnelle
Fraser R.
Fort George
Nanaimo
Comox
Burrard Inlet
Victoria
Esquimault
Chilliwack
Lillooet Lake
Seton Lake
Skagit

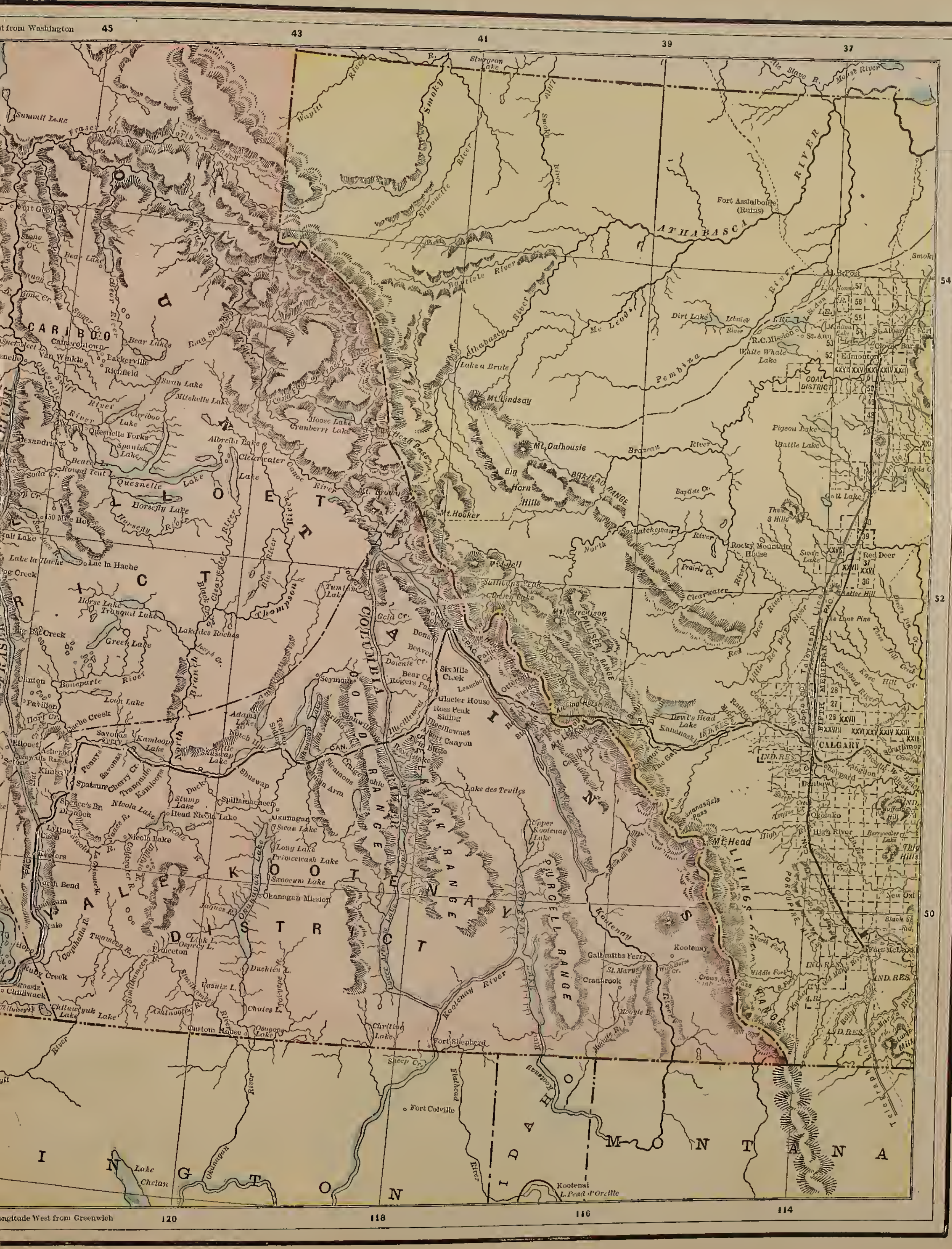
BRITISH COLUMBIA

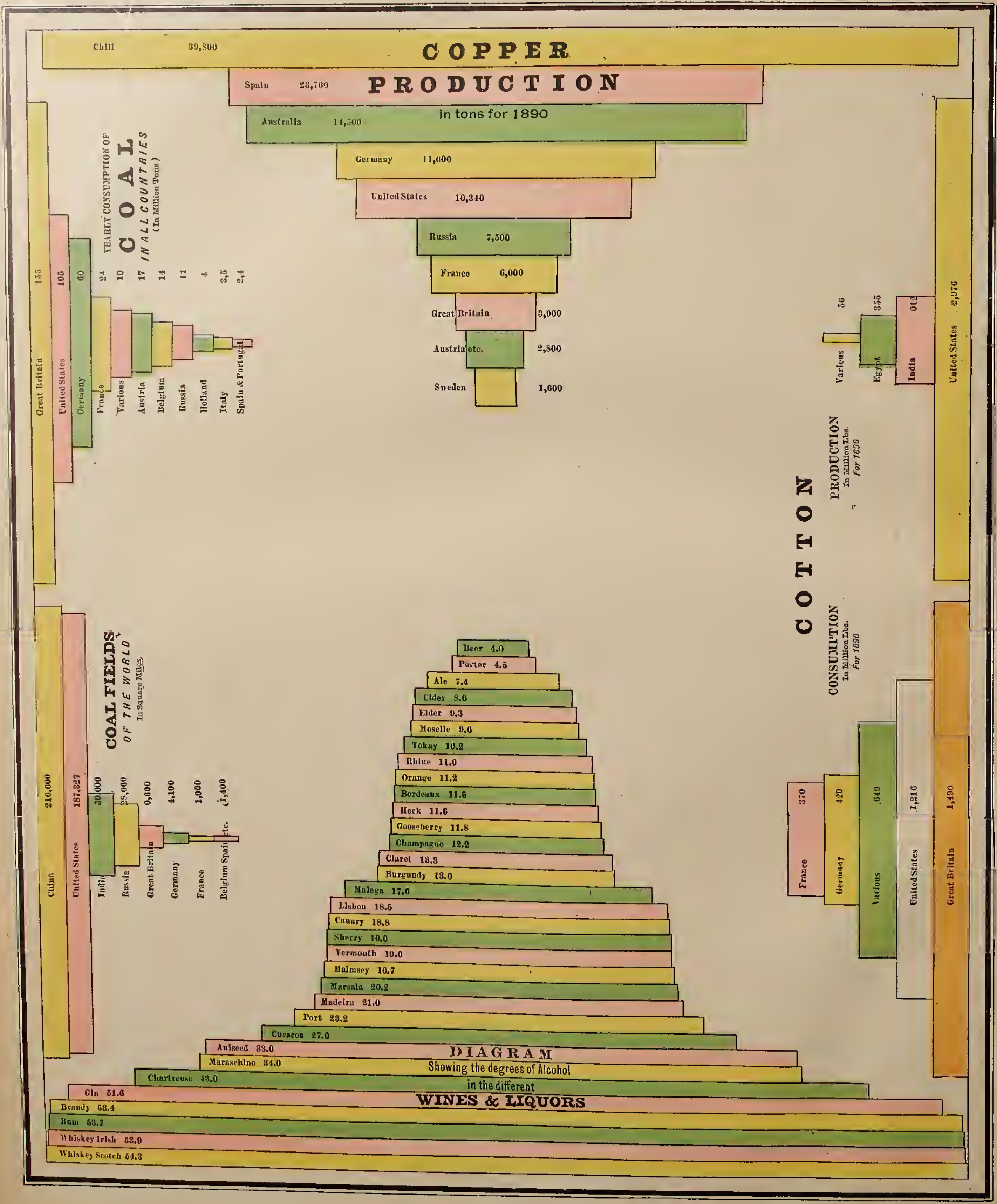
Geo. F. Cram, Engraver

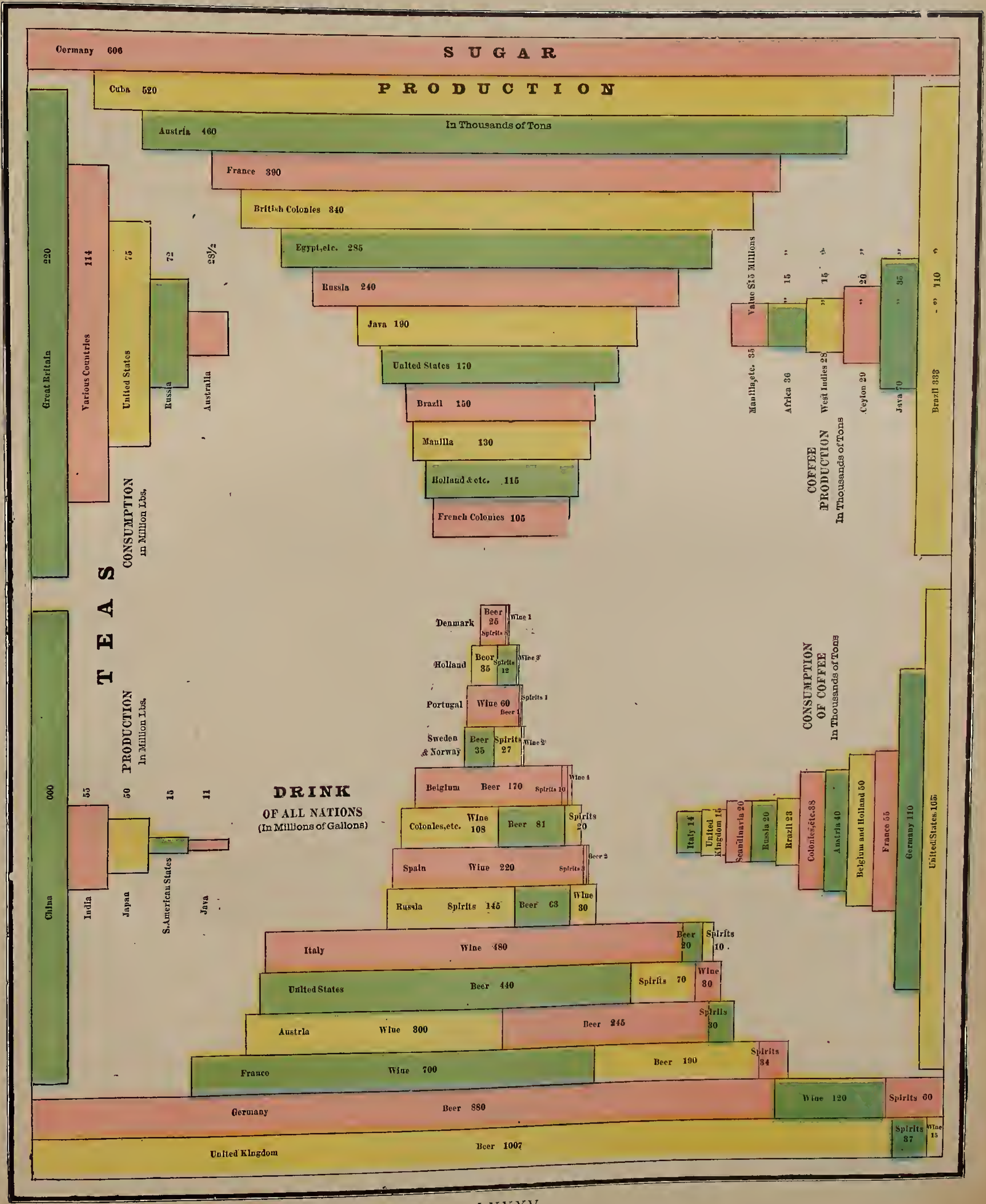
Chicago, Ill.

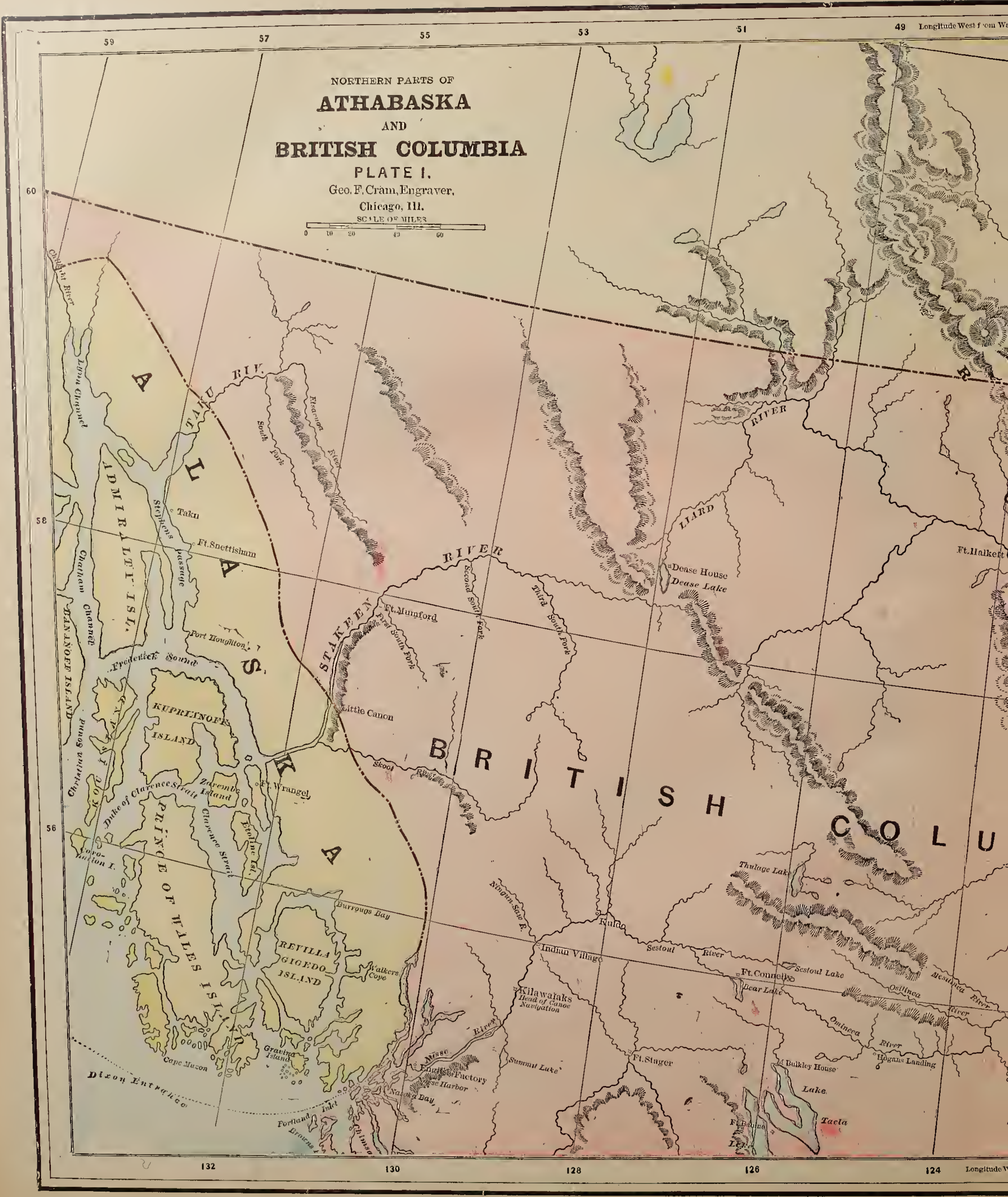
SCALE OF MILES.

0 10 20 40 60 80


Longitude West from Washington
45
43
41
39
37
Longitude West from Greenwich
120
118
116
114
54
52
50
ATHABASCA RIVER
Fort Assiniboine (Ruins)
Smoky River
Simonette River
Wapiti River
Sturgeon Lake
Slave R.
Mouse River
Baptiste River
Athabasca River
Lake a Brule
Mc Leods River
Pembina River
Dirt Lake
Mt. Lindsay
Mt. Dalhousie
Big Horn Hills
BRAZEAU RANGE
Brazeau River
Baptiste Cr.
Mt. Hooker
Mt. Brown
Mt. Lyell
Mt. Murchison
Sullivan's Peak
Glacier Lake
North Saskatchewan River
Rocky Mountain House
Clearwater River
Prairie Cr.
Red Deer River
Little Red Deer River
Pigeon Lake
Battle Lake
Gull Lake
The 3 Hills
Swan Lake
Red Deer
Lone Pine
Knee Hill Cr.
Rosebud River
R.C. Mission
St. Ann
White Whale Lake
St. Albert
Edmonton
Fort Saskatchewan
COAL DISTRICT
St. Anne
CALGARY
Strathmore
IND. RES.
Devil's Head Lake
Kananaskis
Bow River
Mc Head
Kananaskis Pass
High River
Okotoks
Berry water Cr.
Three Hills
Porcupine Hills
New Oxl
Black Sp. Rid.
Fort McLeod
IND. RES.
North Fork
Middle Fork
Crows Nest Pass
Old Man's River
Belly River
St. Mary's River
Telegraph
LIVINGSTONE RANGE
Kootenay
Kootenay River
Galbraiths Ferry
St. Marys
Cranbrook
Moyie L.
PURCELL RANGE
Upper Kootenay Lake
Lake des Truites
SELKIRK RANGE
GOLD RANGE
COLUMBIA
Glacier House
Ross Peak Siding
Illecillewaet
Albert Canyon
Six Mile Creek
Leanchoil
Field
Rogers Pass
Donald
Beaver
Golden
Kicking Horse Pass
PALLISER RANGE
Revelstoke
Columbia River
Seymour
Shuswap Lake
Sicamous
Salmon Arm
Spallumcheen
Okanagan Lake
Okanagan Mission
Long Lake
Swan Lake
Priest Lake
Duck
Kamloops Lake
Kamloops
Savonas Ferry
Tranquille
Cherry Cr.
Spatsum
Ashcroft
Clinton
Pavilion
Bonaparte River
Loon Lake
Green Lake
Horse Lake
Tranquil Lake
Canim Lake
Lac la Hache
Lake la Hache
Dog Creek
Big Creek
Lake des Roches
Thompson River
North Thompson
Adams Lake
Blue River
Clearwater Lake
Canoe River
Albreda Lake
Tete Jaune Cache
Moose Lake
Cranberry Lake
Yellow Head Pass
Quesnelle Lake
Horsefly Lake
Quesnelle Forks
Spanish Lake
Cariboo Lake
Mitchell Lake
Swan Lake
Bear Lake
Bear Lakes
CARIBOO
Cameronton
Van Winkle
Barkerville
Richfield
Quesnelle
Alexandria
Soda Cr.
Round Tent
150 Mile House
Fraser River
Fort George
Stone Cr.
Bear Lake
Summit Lake
Bowron Lake
Nicola Lake
Nicola R.
Coldwater R.
Spence's Br.
Lytton
Boston Bar
North Bend
Spuzzum
Yale
Hope
Ruby Creek
Agassiz
Chilliwack
Chilliwhack Lake
Chilukweyuk Lake
Similkameen R.
Princeton
Tulameen R.
Osprey L.
Link L.
Duchien L.
Vaseux L.
Osoyoos Lake
Custom House
Chutes
Christina Lake
Kootenay River
Fort Shepherd
Sheep Cr.
Fort Colville
Flathead River
Kootenai
L. Pend d'Oreille
Lake Chelan
Okanagan
LILLOOET
CARIBOO DISTRICT
LILLOOET DISTRICT
YALE DISTRICT
KOOTENAY DISTRICT
CAN. PAC. R.R.
WASHINGTON
IDAHO
MONTANA

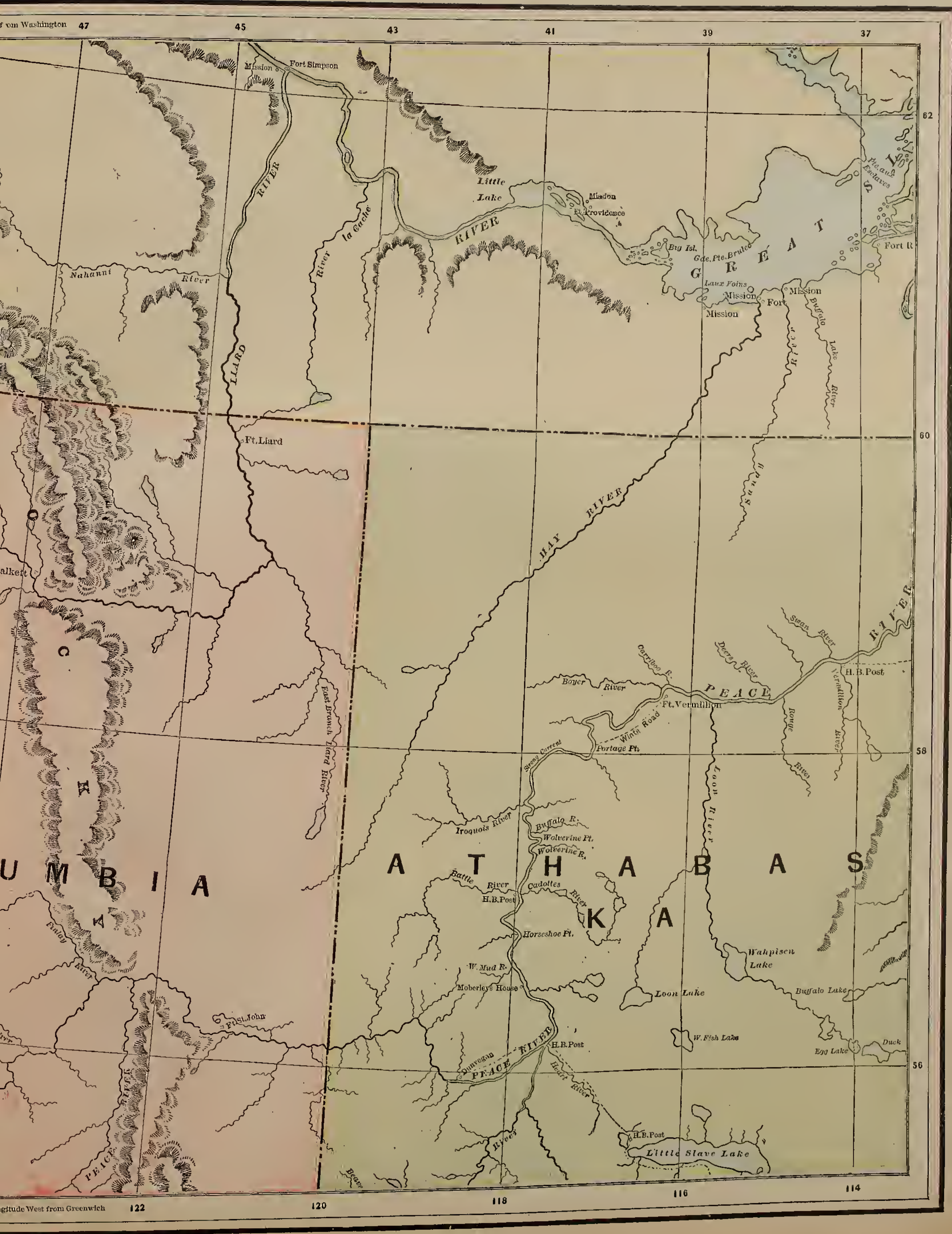

COPPER PRODUCTION
in tons for 1890
Chili 30,800
Spain 23,700
Australia 14,500
Germany 11,600
United States 10,340
Russia 7,500
France 6,000
Great Britain 3,000
Austria etc. 2,800
Sweden 1,600
YEARLY CONSUMPTION OF COAL IN ALL COUNTRIES
(In Million Tons)
Great Britain 155
United States 105
Germany 90
France 24
Various 10
Austria 17
Belgium 14
Russia 11
Holland 4
Italy 3,5
Spain & Portugal 2,4
COAL FIELDS OF THE WORLD
In Square Miles
China 210,000
United States 187,327
India 30,000
Russia 28,000
Great Britain 9,000
Germany 4,100
France 1,000
Belgium Spain etc. 1,400
COTTON
PRODUCTION
In Million Lbs.
For 1890
Various 56
Egypt 355
India 912
United States 2,976
CONSUMPTION
In Million Lbs.
For 1890
France 370
Germany 420
Various 649
United States 1,216
Great Britain 1,490
DIAGRAM
Showing the degrees of Alcohol
in the different
WINES & LIQUORS
Beer 4.0
Porter 4.5
Ale 7.4
Cider 8.6
Elder 9.3
Moselle 9.6
Tokay 10.2
Rhine 11.0
Orange 11.2
Bordeaux 11.5
Hock 11.6
Gooseberry 11.8
Champagne 12.2
Claret 13.3
Burgundy 13.0
Malaga 17.6
Lisbon 18.5
Canary 18.8
Sherry 10.0
Vermouth 19.0
Malmsey 10.7
Marsala 20.2
Madeira 21.0
Port 23.2
Curacoa 27.0
Aniseed 33.0
Maraschino 34.0
Chartreuse 43.0
Gin 51.6
Brandy 53.4
Rum 53.7
Whiskey Irish 53.9
Whiskey Scotch 54.3

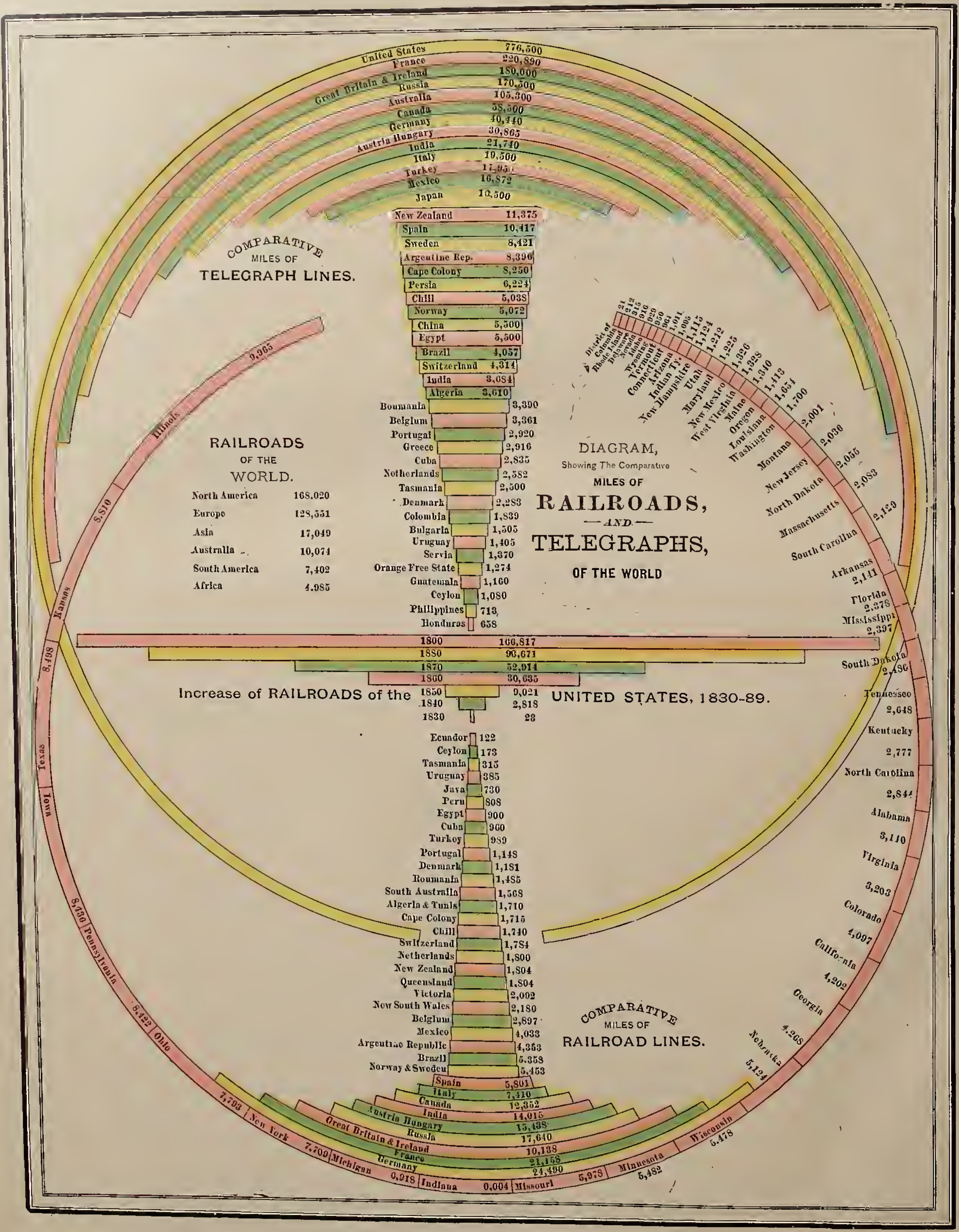

SUGAR PRODUCTION
In Thousands of Tons
Germany 606
Cuba 520
Austria 460
France 390
British Colonies 340
Egypt,etc. 285
Russia 240
Java 190
United States 170
Brazil 150
Manilla 130
Holland &c etc. 115
French Colonies 105
TEAS
CONSUMPTION
in Million Lbs.
Great Britain 220
Various Countries 114
United States 75
Russia 72
Australia 23½
PRODUCTION
in Million Lbs.
China 000
India 55
Japan 50
S.American States 15
Java 11
COFFEE PRODUCTION
In Thousands of Tons
Manilla,etc. 35 Value $15 Millions
Africa 36 " 15 "
West Indies 28 " 15 "
Ceylon 29 " 20 "
Java 70 " 35 "
Brazil 333 " 110 "
CONSUMPTION OF COFFEE
In Thousands of Tons
Italy 14
United Kingdom 15
Scandinavia 20
Russia 20
Brazil 23
Colonies,etc.38
Austria 40
Belgium and Holland 50
France 55
Germany 110
United States 165
DRINK
OF ALL NATIONS
(In Millions of Gallons)
Denmark Beer 25 Spirits 8 Wine 1
Holland Beer 85 Spirits 12 Wine 3
Portugal Wine 60 Beer 1 Spirits 1
Sweden & Norway Beer 35 Spirits 27 Wine 2
Belgium Beer 170 Spirits 10 Wine 4
Colonies,etc. Wine 108 Beer 81 Spirits 20
Spain Wine 220 Spirits 3 Beer 2
Russia Spirits 145 Beer 63 Wine 30
Italy Wine 480 Beer 20 Spirits 10
United States Beer 440 Spirits 70 Wine 30
Austria Wine 300 Beer 245 Spirits 30
France Wine 700 Beer 190 Spirits 34
Germany Beer 880 Wine 120 Spirits 60
United Kingdom Beer 1007 Spirits 37 Wine 15



NORTHERN PARTS OF
ATHABASKA
AND
BRITISH COLUMBIA
PLATE I.
Geo. F. Cram, Engraver,
Chicago, Ill.

SCALE OF MILES
0
10
20
40
60
59
57
55
53
51
49
Longitude West from W
60
58
56
132
130
128
126
124
Longitude W
ALASKA
BRITISH COLUMBIA
Chilkat River
Lynn Channel
TAKU RIV.
Taku
Ft. Snettisham
Stephens passage
ADMIRALTY ISL.
Chatham Channel
Chatham
BARANOFF ISLAND
Christian Sound
Port Houghton
Frederick Sound
KUPREANOFF ISLAND
Zarembo Island
Ft. Wrangel
Duke of Clarence Strait
PRINCE OF WALES ISLAND
Clarence Strait
Etoline Isl.
Coronation I.
Burroughs Bay
REVILLA GIGEDO ISLAND
Walkers Cove
Gravina Island
Cape Muzon
Dixon Entrance
Portland Inlet
Browns
Chimsean
Nasaka Bay
Nisse
Factory
Harbor
River
South Fork
Eloanna River
STAKEEN RIVER
Ft. Mumford
First South Fork
Second South Fork
Third South Fork
Little Canon
Skoot River
LIARD RIVER
Dease House
Dease Lake
Ft. Halkett
Ningun Saw R.
Kuldo
Indian Village
Sestout River
Sestout Lake
Ft. Connelly
Bear Lake
Kilawataks
Head of Canoe Navigation
Summit Lake
Ft. Stager
Thulage Lake
Ominea River
Osilinca River
Mesilinca River
Hogans Landing
Bulkley House
Lake
Tacla
Ft. Babine
Lake


Longitude West from Washington
47
45
43
41
39
37
62
60
58
56
Longitude West from Greenwich
122
120
118
116
114
Mission
Fort Simpson
LIARD RIVER
River la Gache
Little Lake
Mission
Ft. Providence
RIVER
Big Isl.
Gde. Pte. Brulée
Laux Foins
Mission
Mission
Fort
Mission
GREAT S L
Pte. aux Esclaves
Fort R
Nahanni River
Buffalo Lake River
Hay River
HAY RIVER
Ft. Liard
alkert
C
K
UMBIA
East Branch Liard River
Swan River
Deers River
Carriboo R.
Boyer River
PEACE RIVER
H. B. Post
Ft. Vermillion
Winter Road
Portage Pt.
Vermillion River
Rouge River
Steep Current
Loon River
Iroquois River
Buffalo R.
Wolverine Pt.
Wolverine R.
ATHABASKA
Battle River
H. B. Post
Cadottes River
Horseshoe Pt.
Wahpisen Lake
W. Mud R.
Moberley's House
Loon Lake
Buffalo Lake
Finlay River
Ft. St. John
W. Fish Lake
Duck
Egg Lake
H. B. Post
Dunvegan
PEACE RIVER
Heart River
H. B. Post
River
Little Slave Lake
Beaver
PEACE


DIAGRAM,
Showing The Comparative
MILES OF
RAILROADS,
—AND—
TELEGRAPHS,
OF THE WORLD
COMPARATIVE
MILES OF
TELEGRAPH LINES.
United States 776,500
France 220,890
Great Britain & Ireland 180,000
Russia 170,500
Australia 105,300
Canada 58,500
Germany 40,440
Austria Hungary 30,865
India 21,740
Italy 19,500
Turkey 17,95
Mexico 16,872
Japan 10,500
New Zealand 11,375
Spain 10,417
Sweden 8,421
Argentine Rep. 8,396
Cape Colony 8,250
Persia 6,224
Chili 5,038
Norway 5,072
China 5,500
Egypt 5,500
Brazil 4,057
Switzerland 4,314
India 3,984
Algeria 3,610
Roumania 3,390
Belgium 3,361
Portugal 2,920
Greece 2,916
Cuba 2,835
Netherlands 2,582
Tasmania 2,500
Denmark 2,283
Colombia 1,839
Bulgaria 1,505
Uruguay 1,405
Servia 1,370
Orange Free State 1,274
Guatemala 1,160
Ceylon 1,080
Philippines 713
Honduras 658
RAILROADS
OF THE
WORLD.
North America 168.020
Europe 128,551
Asia 17,049
Australia 10,074
South America 7,402
Africa 4.985
1890 166,817
1880 93,671
1870 52,914
1860 30,635
1850 9,021
1840 2,818
1830 23
Increase of RAILROADS of the UNITED STATES, 1830-89.
Ecuador 122
Ceylon 173
Tasmania 315
Uruguay 385
Java 730
Peru 808
Egypt 900
Cuba 960
Turkey 989
Portugal 1,148
Denmark 1,181
Roumania 1,485
South Australia 1,568
Algeria & Tunis 1,710
Cape Colony 1,715
Chili 1,740
Switzerland 1,784
Netherlands 1,800
New Zealand 1,804
Queensland 1,804
Victoria 2,002
New South Wales 2,180
Belgium 2,897
Mexico 4,033
Argentine Republic 4,353
Brazil 5.358
Norway & Sweden 5,453
Spain 5,801
Italy 7,410
Canada 12,352
India 14,015
Austria Hungary 15,438
Russia 17,640
Great Britain & Ireland 10,138
France 21,158
Germany 24,490
COMPARATIVE
MILES OF
RAILROAD LINES.
District of Columbia 21
Rhode Island 212
Delaware 315
Nevada 916
Idaho 920
Wyoming 950
Vermont 961
Connecticut 1,011
Arizona 1,065
Indian Ty. 1,115
New Hampshire 1,124
Utah 1,212
Maryland 1,225
New Mexico 1,326
West Virginia 1,328
Maine 1,340
Oregon 1,413
Louisiana 1,654
Washington 1,700
Montana 2,001
New Jersey 2,030
North Dakota 2,055
Massachusetts 2,083
South Carolina 2,120
Arkansas 2,141
Florida 2,378
Mississippi 2,397
South Dakota 2,486
Tennessee 2,648
Kentucky 2,777
North Carolina 2,844
Alabama 3,140
Virginia 3,203
Colorado 4,097
California 4,202
Georgia 4,268
Nebraska 5,124
Wisconsin 5.478
Minnesota 5,482
5,978 Missouri
0,004 Indiana
0,918 Michigan
7,709 New York
7,703 Ohio
8,422 Pennsylvania
8,430 Iowa
Texas
8,498 Kansas
8,810 Illinois
9,965

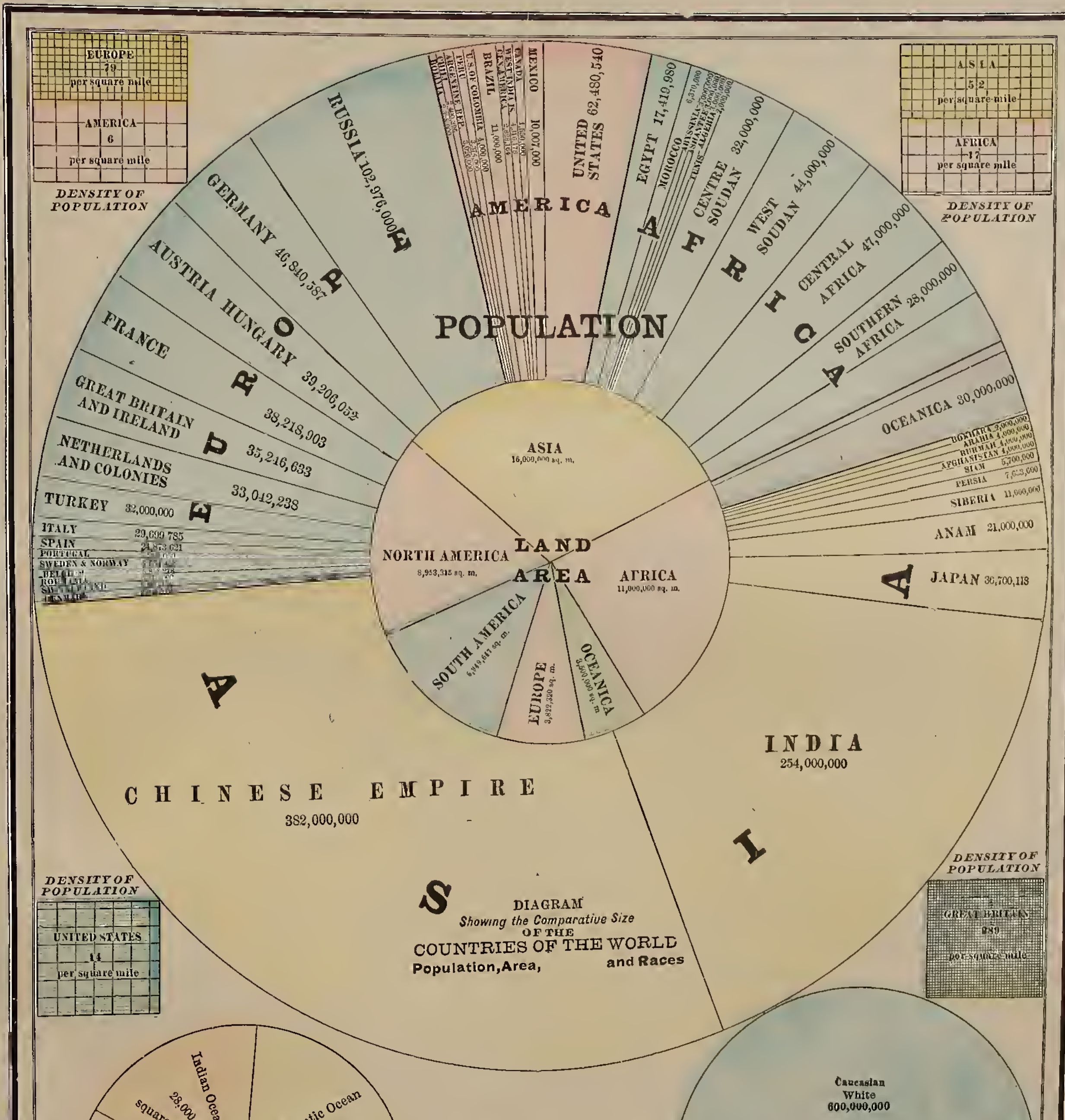
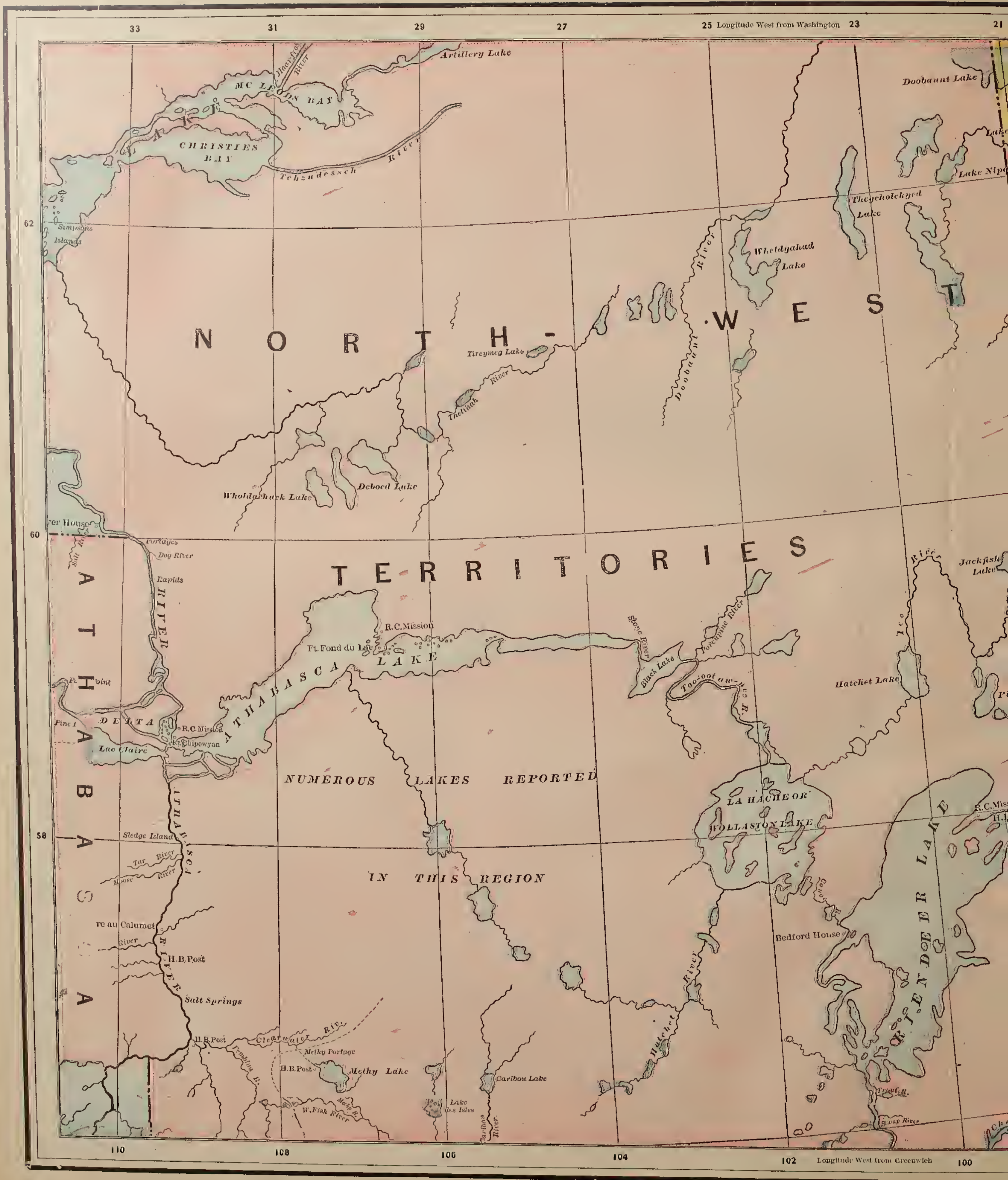
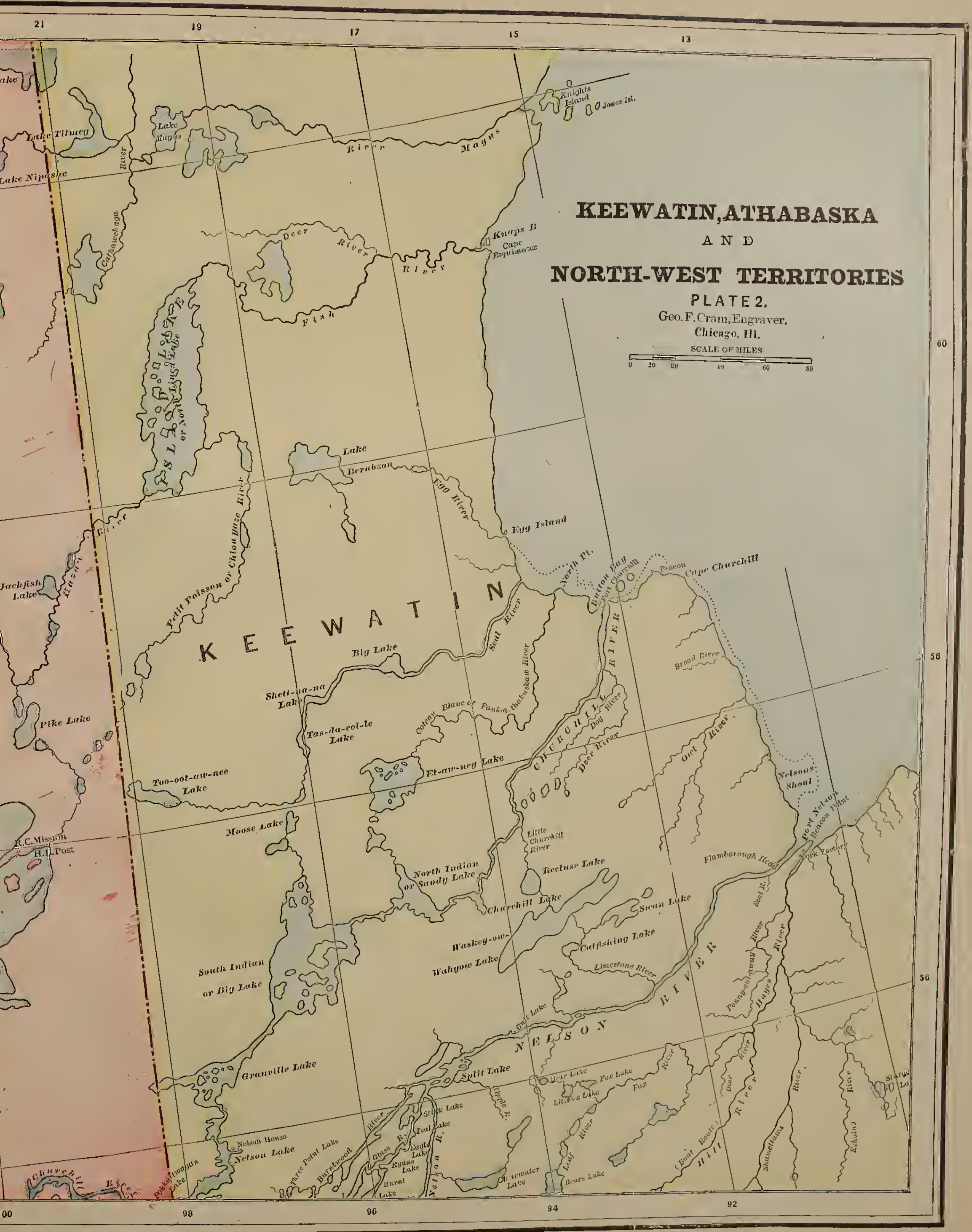


DIAGRAM
Showing the Comparative Size
OF THE
COUNTRIES OF THE WORLD
Population, Area, and Races

Proportionate size of Oceans.



Longitude West from Washington
33
31
29
27
25
23
21
Artillery Lake
Hoarfrost River
MC LEODS BAY
LAKE
CHRISTIES BAY
Tehzudessch River
Simpsons Islands
62
Doobaunt Lake
Lake Nip
Theycholekyed Lake
Wheldyahad Lake
Doobaunt River
NORTH-WEST
Tireymeg Lake
Thelliah River
Wholdaihack Lake
Deboed Lake
60
Portages
Dog River
Rapids
RIVER
TERRITORIES
Jackfish Lake
River
R.C.Mission
Ft. Fond du Lac
ATHABASCA LAKE
Stone River
Black Lake
Porcupine River
Toozoot ow-tes R.
Ice
Hatchet Lake
ATHABASCA
DELTA
Pine I.
Lac Claire
R.C.Mission
Ft. Chipewyan
NUMEROUS LAKES REPORTED
IN THIS REGION
LA HACHE OR WOLLASTON LAKE
R.C.Mission
58
Sledge Island
Tar River
Moose River
ATHABASCA
re au Calumet River
H.B.Post
RIVER
Salt Springs
Bedford House
REINDEER LAKE
Hatchet River
H.B.Post
Clearwater Riv.
Methy Portage
H.B.Post
Methy Lake
Pembina R.
W.Fish River
Methy R.
Lake des Isles
Caribou River
Caribou Lake
Trout R.
Swamp River
110
108
106
104
102
Longitude West from Greenwich
100

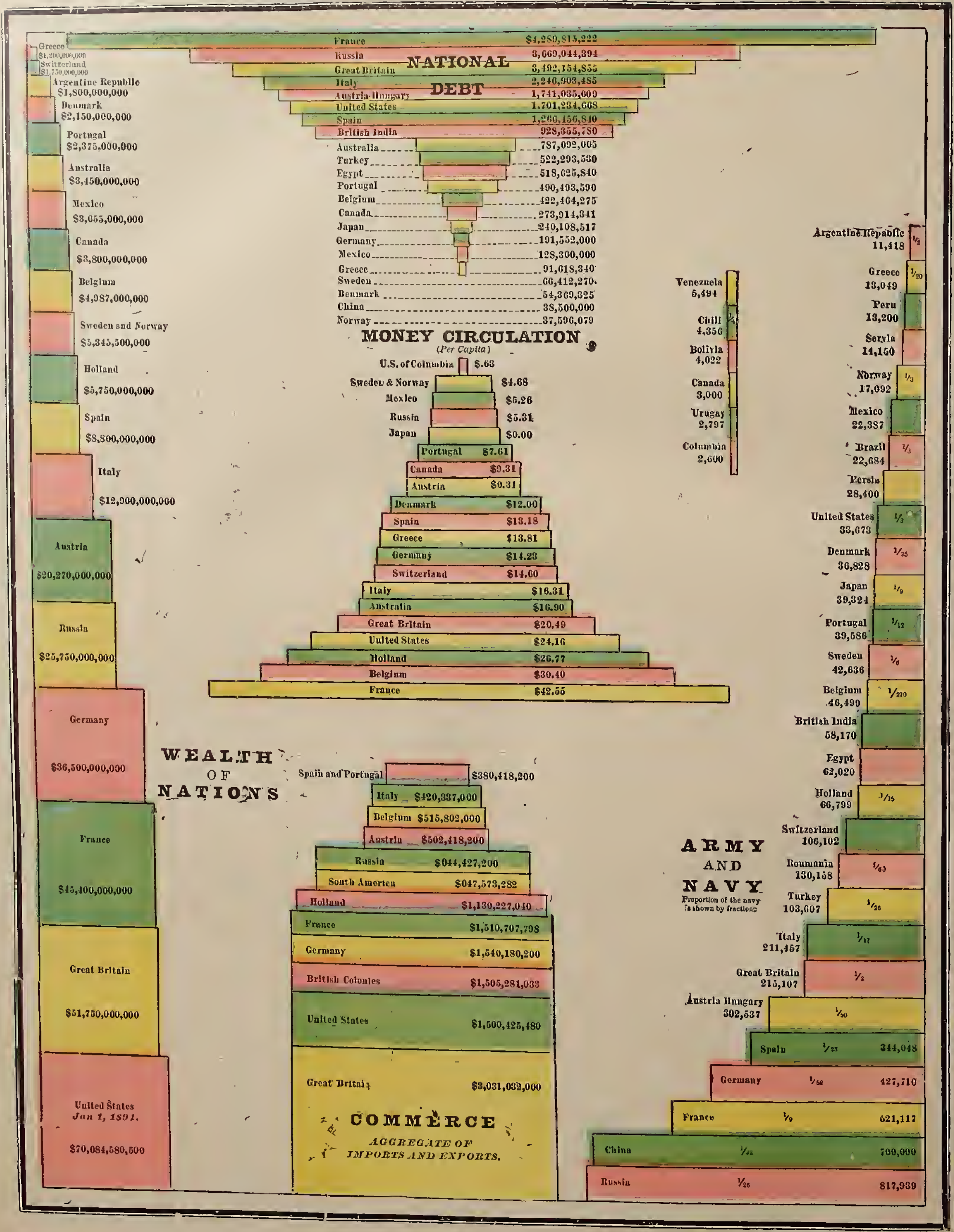


KEEWATIN, ATHABASKA AND NORTH-WEST TERRITORIES

PLATE 2.

Geo. F. Cram, Engraver,
Chicago, Ill.

SCALE OF MILES
0
10
20
40
60
80
21
19
17
15
13
60
58
56
00
98
96
94
92
KEEWATIN
Knights Island
Jones Isl.
Lake Titmeg
Lake Magus
Magus River
Lake Nipashe
River
Cathawchaga
Deer River
Fish River
Knaps B
Cape Esquimaux
SLAVE LAKE or North Lined Lake
Lake Berabzon
Egg River
Egg Island
North Pt.
Button Bay
Fort Churchill
Beacon
Cape Churchill
Kazan River
Jackfish Lake
Petit Poisson or Chlouyaze River
Big Lake
Seal River
Pauk-a-thakuskaw River
Shett-ha-na Lake
Tas-da-col-le Lake
Colony Blanc or
CHURCHILL RIVER
Dog River
Deer River
Broad River
Owl River
Pike Lake
Too-oot-aw-nee Lake
Et-aw-ney Lake
Nelsons Shoal
Port Nelson
Beacon Point
York Factory
R.C. Mission
H.B. Post
Moose Lake
Little Churchill River
Recluse Lake
Flamborough Head
North Indian or Sandy Lake
Churchill Lake
Swan Lake
Seal R.
Waskey-ow-Wahyow Lake
Catfishing Lake
Limestone River
South Indian or Big Lake
Pennycutaway River
Hayes River
Gull Lake
NELSON RIVER
Granville Lake
Split Lake
Bear Lake
Fox Lake
Lit. Fox Lake
Fox River
Deer River
Hill River
(Boat Route)
Stick Lake
Teal Lake
Eagle Lake
Ryans Lake
Burnt Lake
Grass R.
Nelson R.
Three Point Lake
Burntwood River
Nelson House
Nelson Lake
Footprint Lake
Clearwater Lake
Leaf River
Bears Lake
Shamattawa
Echoing
River
Sturgeon Lake
Churchill R.


NATIONAL DEBT
France $4,289,815,222
Russia 3,669,044,394
Great Britain 3,492,154,855
Italy 2,246,903,485
Austria-Hungary 1,741,035,609
United States 1,701,234,668
Spain 1,266,456,840
British India 928,355,780
Australia 787,092,005
Turkey 522,293,530
Egypt 518,625,840
Portugal 490,403,590
Belgium 422,404,275
Canada 273,914,341
Japan 240,108,517
Germany 191,552,000
Mexico 128,300,000
Greece 91,618,340
Sweden 66,412,270
Denmark 54,369,325
China 38,500,000
Norway 37,596,079
MONEY CIRCULATION
(Per Capita)
U.S. of Columbia $.63
Sweden & Norway $4.68
Mexico $5.26
Russia $5.31
Japan $0.00
Portugal $7.61
Canada $9.31
Austria $9.31
Denmark $12.00
Spain $13.18
Greece $13.81
Germany $14.23
Switzerland $14.60
Italy $16.31
Australia $16.90
Great Britain $20.49
United States $24.16
Holland $26.77
Belgium $30.40
France $42.55
WEALTH OF NATIONS
Greece $1,200,000,000
Switzerland $1,750,000,000
Argentine Republic $1,800,000,000
Denmark $2,150,000,000
Portugal $2,375,000,000
Australia $3,450,000,000
Mexico $3,655,000,000
Canada $3,800,000,000
Belgium $4,987,000,000
Sweden and Norway $5,345,500,000
Holland $5,750,000,000
Spain $8,800,000,000
Italy $12,000,000,000
Austria $20,270,000,000
Russia $25,750,000,000
Germany $36,500,000,000
France $45,400,000,000
Great Britain $51,750,000,000
United States Jan 1, 1891. $70,084,580,500
COMMERCE
AGGREGATE OF IMPORTS AND EXPORTS.
Spain and Portugal $380,418,200
Italy $420,337,000
Belgium $515,802,000
Austria $502,418,200
Russia $644,427,200
South America $647,573,282
Holland $1,130,227,040
France $1,510,707,798
Germany $1,540,180,200
British Colonies $1,505,281,033
United States $1,500,425,480
Great Britain $3,031,032,000
ARMY AND NAVY
Proportion of the navy is shown by fractions
Venezuela 5,494
Chili 4,356 1/4
Bolivia 4,022
Canada 3,000
Urugay 2,797
Columbia 2,600
Argentine Republic 11,418 1/2
Greece 13,049 1/20
Peru 13,200
Servia 14,150
Norway 17,092 1/3
Mexico 22,387
Brazil 22,684 1/3
Persia 28,400
United States 33,673 1/3
Denmark 36,828 1/25
Japan 39,324 1/9
Portugal 39,586 1/12
Sweden 42,636 1/6
Belgium 46,499 1/270
British India 58,170
Egypt 62,020
Holland 66,799 1/15
Switzerland 106,102
Roumania 130,158 1/63
Turkey 103,607 1/26
Italy 211,457 1/17
Great Britain 215,107 1/2
Austria Hungary 302,537 1/50
Spain 1/23 344,048
Germany 1/62 427,710
France 1/9 621,117
China 1/42 700,000
Russia 1/26 817,939

DICTIONARY OF STATISTICS.

A COLLECTION of facts arranged and classified, respecting the condition of the several Nations of the World, embracing all such interests as may be stated in numbers or in a tabular and classified arrangement. It is confidently believed that there is here presented the greatest number of facts, and the largest amount of practical information, the whole so classified, condensed and illustrated by pictorial diagrams or charts as to present the most convenient and helpful book of ready reference ever before published in one volume.

ABLE-BODIED. The proportion of men capable of bearing arms in various countries of the world, are as follows, per cent. of population:—England, 23; Scotland, 22; Ireland, 22; France, 27; Austria, 25; Germany, 24; Italy, 25; Belgium, 25; Holland, 25; Spain, 26; Denmark, 25; Sweden, 25; Norway, 24; United States. 23: Greece, 23.

ACADEMIES AND SOCIETIES. See *Universities and Colleges.*

ACCIDENTS. See *Railway Accidents.*

ACCIDENTAL DEATHS. The ratio in the principal countries in 1,000 deaths is: United States, 39; Norway, 33; Scotland, 31; Switzerland, 28; Sweden, 26; Ireland, 18; Belgium, 17; Germany, 16; France, 12; Spain, 12; Denmark, 12; Austria, 10; Russia, 6; Italy, 5.

It is estimated that there are a quarter of a million of accidental deaths annually in the world. In Europe and the United States there are upwards of 100,000.

According to the report of the Provost Marshal General of the United States there were 184,650 deaths from disease or accident in addition to the number killed in action or died of wounds while in the Federal service during the Civil War.

ACCUMULATION. The increase of wealth in the United States in ten years, ending 1890, was 20,000 million dollars. The component parts of American wealth in 1880, in million dollars, was: Land, 10,750; Cattle, 1,890; Railways, 5,950; Houses, 13,900; Sundries, 9,205; a total of 41.695.

AEROLITES. The following table gives the size and locality in which the largest Aerolites have fallen:—

DATE.	LOCALITY.	WEIGHT LBS.	REMARKS.	DATE.	LOCATION.	WEIGHT LBS.	REMARKS.
1748	Jenisay.........	1,600	... .	1812	Prague...... ..		200 hot stones......
1783	Gran Chaco	32,000	Near Tucuman...	1829	Bohumelitz......	103	Bohemia..........
1784	Bendego, Brazil.	17,000	....	1866	Knyahinza.	670	With 1,000 smaller.
1793	Graf Reinet	300	South Africa......	1870	Greenland	49,000	Now at Copenhagen
1803	Normandy.......		2,000 red-hot stones	1871	Greenland	20,000	Now at St. Peter'g

The two latter were found in the years given, but may have fallen centuries before. That of Gran Chaco is 95 per cent. iron. The British museum has an aerolite weighing five tons.

Scientists are now generally agreed that aerolites originated outside the earth.

AERONAUT. See *Balloons.*

AGE. A man's working life is divided into four decades:

20 to 30 - bronze. | 30 to 40 - silver. | 40 to 50 - gold. | 50 to 60 - iron.

Intellect and judgment are strongest between 40 and 50. The percentages of population to age in various countries are given in the following table. The United States shows the youngest, France the oldest average of all living years.

Country.	Percentage of Population.			Average age of all Living Years.	Country.	Percentage of Population.			Average age of all Living Years.
	Under 20 Yrs	From 20to60	Over 60.			Under 20 Yrs	From 20to60	Over 60.	
England	46	47	7	27 1	Spain...............	42	52	6	2[illegible].2
Scotland.............	46	45	9	27.4	Brazil	46	45	9	27 3
Ireland	46	43	11	28 6	Belgium..............	40	50	10	29 7
France...	36	52	12	32 2	Holland	43	49	8	28 3
Germany....	43	49	8	28 0	Denmark	42	50	8	28.4
Italy.	44	49	7	27.6	Sweden..............	43	49	8	28 0
Austria	43	50	7	27 7	Norway.............	43	48	9	28 0
Greece	48	47	5	25.5	United States	50	45	5	24 9

See *Life.*

ADMINISTRATIONS OF THE UNITED STATES. See *Presidents.*

ADMISSION OF STATES. The following table gives the date of the admission of the several States into the Union:—

THE THIRTEEN ORIGINAL STATES

	STATES.	Ratified the Constitution.		STATES.	Ratified the Constitution.
1	Delaware	1787, December 7.	8	South Carolina...........	1788, May 23.
2	Pennsylvania	1787. December 12.	9	New Hampshire...... .	1788, June 21.
3	New Jersey......	1787, December 18.	10	Virginia.................	1788, June 25.
4	Georgia................	1788, January 2.	11	New York..............	1788, July 26.
5	Connecticut.............	1788, January 9.	12	North Carolina..........	1789, November 21.
6	Massachusetts...........	1788, February 6.	13	Rhode Island......... .	1790, May 29.
7	Maryland	1788, April 28.			

STATES ADMITTED TO THE UNION.

	STATES.	ADMITTED.		STATES.	ADMITTED.
1	Vermont..	1791, March 4.	18	California...............	1850, September 9.
2	Kentucky	1793, June 1.	19	Minnesota...	1858, May 11.
3	Tennessee....	1796, June 1	20	Oregon......	1859, February 14.
4	Ohio	1802, November 29.	21	Kansas......	1861, January 29.
5	Louisiana	1812, April 30.	22	West Virginia.	1863, June 19.
6	Indiana	1816, December 11.	23	Nevada	1864, October 31.
7	Mississippi	1817, December 10.	24	Nebraska	1867, March 1.
8	Illinois.................	1818, December 3.	25	Colorado.	1876, August 1
9	Alabama....	1819, December 11.	26	North Dakota.	1889, November
10	Maine...................	1820, March 15.	27	South Dakota	1889, November
11	Missouri	1821, August 10.	28	Montana.............	1889, November
12	Arkansas	1836, June 15.	29	Washington...... ...	1889, November
13	Michigan................	1837, January 26.	30	Idaho	1890 July 3.
14	Florida....	1845, March 3.	31	Wyoming	1890, July 10.
15	Texas.....	1845, December 29.	32	Utah.	
16	Iowa.......	1846, December 28.	33	New Mexico.....	
17	Wisconsin..............	1848, May 29	34	Arizona	

AGRICULTURAL PRODUCTIONS of the United States. The following is the U. S. Official Report (1888) of the principal agricultural productions of this country:—

Barley, bushels.....................	63,884,000	Orchard products.................. .	a$50,876,154
Buckwheat, bushels	12,050,000	Potatoes, Irish, bushels....	202,365,000
Butter, pounds......	a777,250,287	" sweet, "	a33,378,693
Cheese, pounds.	a27,272,489	Rice, pounds.	a110,131,373
Cotton, pounds.....	3,438,188,060	Rye, bushels	28,415,000
Hay, tons.......	46,643,944	Sugar, (cane) pounds....	351,855,877
Hops, pounds.......	a26,546,378	Tobacco, pounds.........	565,795,000
Indian Corn, bushels.	2,112,892,000	Wheat, bushels.	490,560,000
Molasses, (cane) gallons	a16,573,273	Wool, pounds...	265,000,000
Oats, bushels...	751,515,000	a1880.	

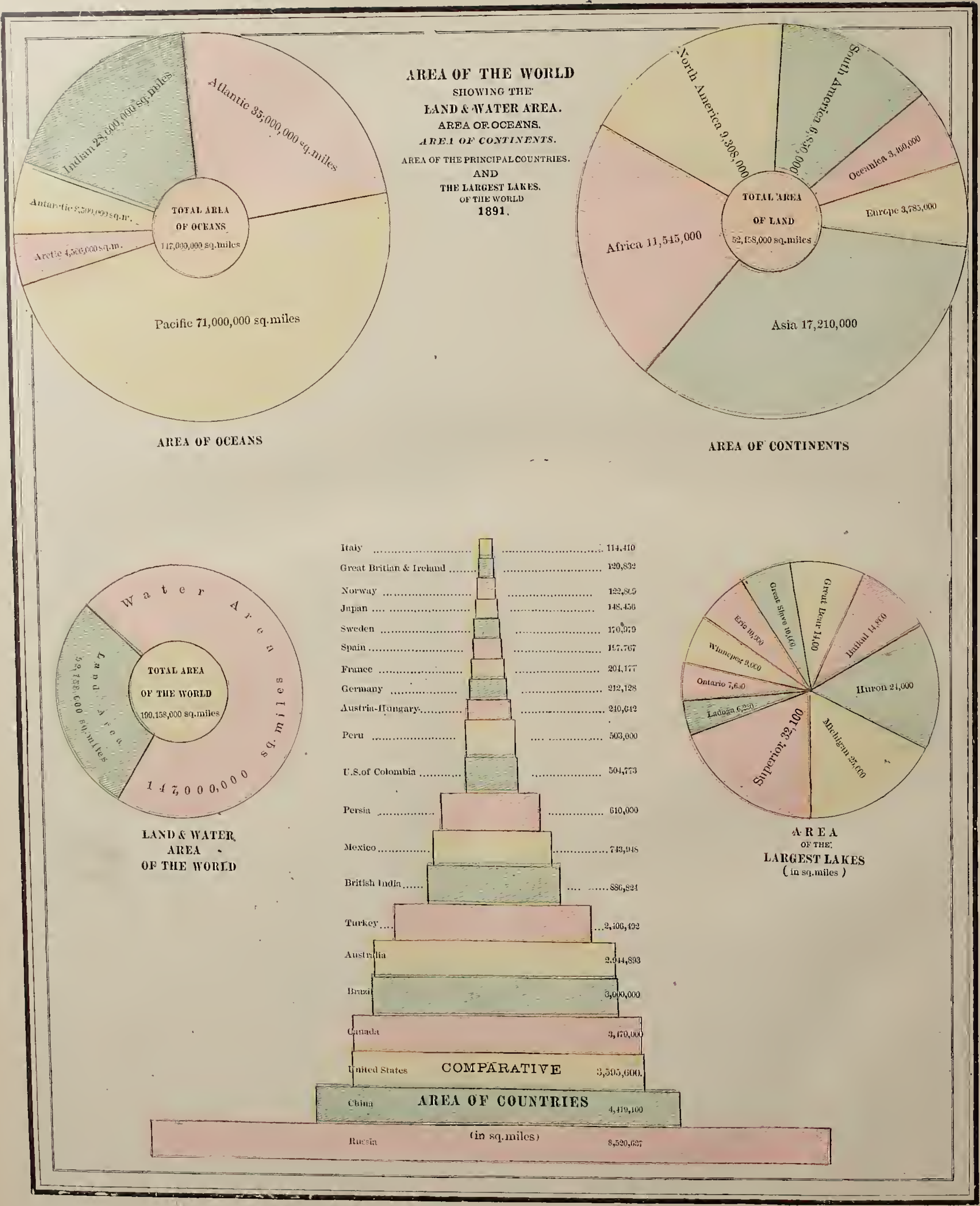
LIVE STOCK. Number of horses, 14,213,837; mules, 2,331,027; oxen and other cattle, 36,849,624; milch cows, 15,952,883; sheep, 44,336,072; swine, 51,602,780. Official statistics 1890.

AGRICULTURE. This great industry, including not only tillage, but also forestry and pasture, maintains 209 million of people in the various countries named below. It represents a capital of more than 100 thousand million dollars, and an annual product of 16 thousand million dollars. The following table shows the capital invested and the yearly income:—

COUNTRY.	CAPITAL.					INCOME.				
	Value in Million Dollars.					Value of Products in Million Dollars.				
	Land.	Timber	Cattle.	Sundries.	Total.	Grain.	Other Crops.	Cattle.	Forestry.	Total.
United States.	$9,615	$ 900	$1,845	$2,400	$ 14,740	$1,975	$ 695	$ 900	$ 300	$3,020
Great Britain.	8,585	250	1,175	1,190	11,300	310	290	685	15	1,3[illegible]0
France .. .	13,120	910	1,060	1,120	16,210	805	820	550	45	2,2[illegible]0
Germany	18,300	1,320	1,150	1,180	13,930	615	915	660	60	2,281
Russia	6,930	2,650	1,725	1,820	13,125	1,330	355	725	135	2,515
Austria	6,450	1,300	1,025	1,080	9,855	550	475	510	75	1,6[illegible]0
Italy	4,050	400	280	485	5,215	325	380	165	20	89[illegible]
Spain	3,300	350	285	310	4,245	300	185	180	15	68[illegible]
Belgium	1,215	75	150	290	1,730	70	85	65	5	225
Holland	1,060	25	165	425	1,075	35	95	95	...	225
Denmark.......	1,050	20	155	140	1,365	75	40	70	... .	185
Sweden........	1,560	650	210	150	2,570	80	55	70	55	2[illegible]0
Australia.	910	50	340	350	1,610	65	120	195	...	3[illegible]0
Canada. .. .	900	240	175	220	1,535	110	45	105	30	2[illegible]0
Portugal......	790	50	55	130	1,025	40	80	30	5	155
Norway	550	310	105	50	1,015	15	20	35	25	95
Greece	525	35	30	70	660	10	35	10	5	50
Total.........	$71,020	$9,535	$9,900	$11,400	$101,855	$6,730	$1,680	$5,140	$ 790	$16,440

The above does not include the public lands in the United States or Australia.

AREA OF THE WORLD
SHOWING THE
LAND & WATER AREA.
AREA OF OCEANS.
AREA OF CONTINENTS.
AREA OF THE PRINCIPAL COUNTRIES.
AND
THE LARGEST LAKES.
OF THE WORLD
1891.



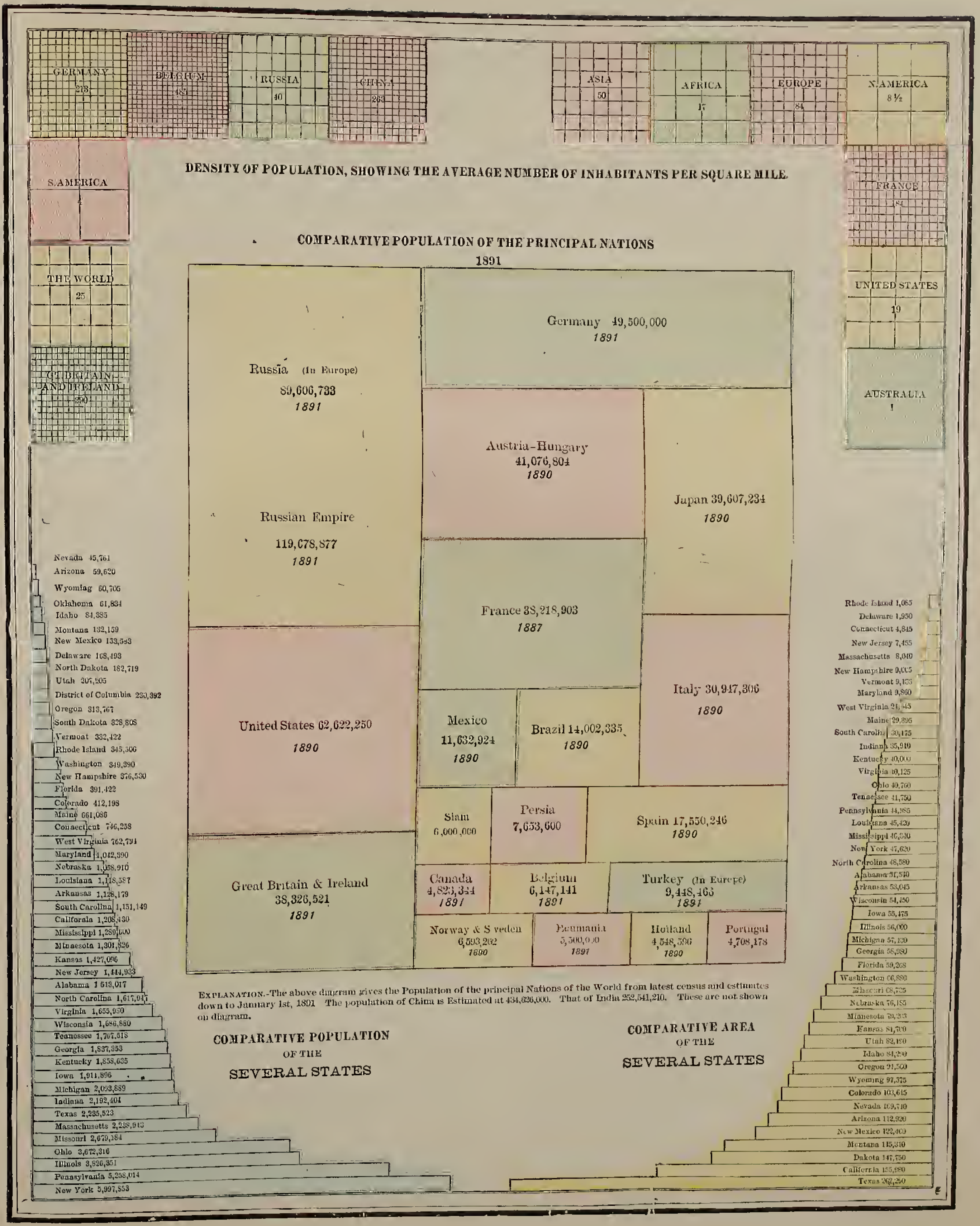
AREA OF OCEANS

AREA OF CONTINENTS

LAND & WATER AREA OF THE WORLD

COMPARATIVE AREA OF COUNTRIES (in sq.miles)

AREA OF THE LARGEST LAKES (in sq.miles)



DENSITY OF POPULATION, SHOWING THE AVERAGE NUMBER OF INHABITANTS PER SQUARE MILE.

COMPARATIVE POPULATION OF THE PRINCIPAL NATIONS
1891

COMPARATIVE POPULATION OF THE SEVERAL STATES

COMPARATIVE AREA OF THE SEVERAL STATES

Explanation.-The above diagram gives the Population of the principal Nations of the World from latest census and estimates down to January 1st, 1891 The population of China is Estimated at 434,626,000. That of India 252,541,210. These are not shown on diagram.

AIR. In its pure state air is composed of the following parts:—

Nitrogen	77	Oxygen	21	Other components	2

The percentage of oxygen varies as follows:—

LOCALITY.	PER CENT.	LOCALITY.	PER CENT.
Sea-shore	21.00	Mines	20.50
Confined houses	20.75	When candles go out	18.50

Air travels in healthy years about 4½ miles, and in unhealthy years, about 3½ miles an hour.

The percentage of carbonic acid is as follows:—

In country	.03	In fogs	.07
In town	.04	In crowded streets	.13
In hospitals	.05	In theatres and places of amusement	.30

Each adult inhales a gallon of air per minute, and consumes daily 30 oz. of oxygen.

ALCOHOL.—The degrees of Alcohol in the different wines and liquors are:—

Beer	4.0	Bordeaux	11.5	Canary	18.8	Aniseed	33.0
Porter	4.5	Hock	11.6	Sherry	19.0	Maraschino	34.0
Ale	7.4	Gooseberry	11.8	Vermouth	19.0	Chartreuse	43.0
Cider	8.6	Champagne	12.2	Malmsey	19.7	Gin	51.6
Elder	9.3	Claret	13.3	Marsala	20.2	Brandy	53.4
Moselle	9.6	Burgundy	13.6	Madeira	21.0	Rum	53.7
Tokay	10.2	Malaga	17.3	Port	23.2	Whiskey—Irish	53.9
Rhine	11.0	Lisbon	18.5	Curacoa	27.0	Whiskey—Scotch	54.3
Orange	11.2						

Spirits are said to be proof when they contain 57 per. cent.

ALLOY. See *Coin.*

ALLUVIAL DEPOSITS. The weight of these deposits for every 1,000 gallons of water is as follows:—

	lbs.		lbs.		lbs.		lbs.
Loch Katrine	¼	Geneva	2	Mississippi	6	Harrogate	157
Windermere	½	Danube	2	Spa	14	Oxus	250
Severn	1	Garonne	2	Wear	16	Seidlitz	321
Avon	1	Rhine	2	Ganges	22	Atlantic	448
Tunbridge	1½	Mersey	3	Cheltenham	134		
Spree	1½	Thames	4				

AMERICA'S CUP.* On August 22, 1851, the American yacht America won the prize known as the "America's Cup," in a race round the Isle of Wight, England, starting from Cowes without time allowances. The cutter Aurora, 47 tons, finished second. None of the other starters finished—viz., Schooners: Beatrice, 161 tons; Wyvern, 205 tons; Ione, 75 tons; Constance, 218 tons; Gypsy Queen, 160 tons, and Brilliant (3 masts), 392 tons. Cutters: Volante, 84 tons; Alarm, 193 tons; Mona, 82 tons; Bacchante, 80 tons; Freak, 60 tons, and Eclipse, 50 tons. The America was rated at 170 tons.

In 1857, the "America's Cup" was presented to the New York Yacht Club by its owners, as a perpetual challange Cup. Since which time it has been contested for six times as follows:

1870, English Schooner Cambria against a fleet of the New York Yacht Club, race won by the Magic.

1871, best of seven races, English Schooner Livonia against the Columbia, in three races, against the Sappho, in two races, winning only the third race, the Columbia having become disabled.

1876, the Canadian Schooner Countess of Dufferin, against the Madeline, in two races, the latter winning both.

1881, the Canadian Sloop Atalanta, against the Mischief, in two races, losing both.

1885, the English Cutter Genesta, against the Puritan, in two races, the Puritan winning both.

1886, the English Cutter Galatea, over the New York Yacht Club course, against the Sloop Mayflower, the English Cutter being beaten.

ANIMALS. The average weight and length of life is shown in the following table:—

	Weight, (lbs.)	Y'rs of Life		Weight, (lbs.)	Y'rs of Life		Weight, (lbs.)	Yr's of Life
Rabbit	5	5	Lion	500	40	Horse	1,000	27
Dog	10	12	Cow	750	25	Camel	1,200	40
Sheep	70	12	Ox	900	25	Elephant	6,000	100
Pig	150	10						

AQUEDUCTS. Rome, in the time of the Cæsars, has nine Aqueducts, measuring 249 miles in the aggregate; they poured into the city 320 million gallons daily, or 200 gallons per inhabitant. The great aqueduct of Peru, built by the Incas, was 360 miles long. Among modern works the most noted are:

Name.	Miles.	Gallons Daily.	Cost of Work	Name.	Miles.	Gallons, Daily.	Cost of Work.
Croton	41	88,000,000	$9,000,000	Glasgow	34	50,000,000	$7,750,000
Madrid	47	40,000,000	11,500,000	Washington	16	90,000,000	....
Marseilles	51	60,000,000	2,250,000				

ARCHITECTURE. Doric, Ionic, Corinthian (Greek), Tuscan and Composite (Roman), are the five classic orders. Gothic and its varieties, are of the more modern styles. Following are dates assigned for the buildings named:

Pyramids of Egypt, about B. C. 1500; Memnonium, B. C. 1350; Solomon's Temple, B. C. 1004; Birs Nimroud, B. C. 000; Jupiter Capitolinus, B. O. 616; Parthenon, B. C. 438; Pantheon, A. D. 13; Coloseum, A. D. 70; St. Sophia, A. D. 532; Mosque of Omar, at Jerusalem, A. D. 037; Caves of Ellora, A. D. 700; St. Peters, at Rome, A. D. 1626; St. Paul's, in London, A. D. 1710.

AREA. See Colored Diagram, *Area of the World*, page 18.

ARTESIAN WELLS. These were known at Thebes 2000 years before the Christian era. In modern times, that of Grenelle, near Paris, is the most noted, and eight years were occupied in its boring—1833 to 1841. It gives 700,000 gallons daily. The following table shows some of the most prominent wells of the present day:—

Well.	Feet Deep.	Well.	Feet Deep.	Well.	Feet Deep.	Well.	Feet Deep.
St. Louis	2200	Grenelle, France.	1798	Chicago	700	Trafalgar Sq.	393
Passy	1923	Donchery	1215	Lille	592	St. Denis	263
Kissengen	1880	Calais, France.	1138	Elbeuf	492	Algeria	177

ARMADA. That sent by Philip II. in 1588 for the intended conquest of England and commanded by the Duke of Medina, comprised—

132 ships, | 3,165 cannon, | 10,854 seamen, | 23,200 soldiers.

The British fleet under Lord Howard, supported by Drake and Hawkins, consisted of—

	Royal Navy.	Vessels Hired.	Total.
Ships	41	135	176
Tonnage	16,000	18,500	34,500
Seamen	8,200	6,600	14,800

The Spaniards lost 35 ships and 13,000 men.

ARMS, Coat of See Pictorial Diagram, page 35.

ARMY. See Colored Diagram, *Military Power of Nations*, page 26.

ARMY, Generals of The following is a complete list of the various officers who have commanded the army of the United States since the foundation of our service to the present time, giving the rank held by each, with the period of command: General and Commander-in-Chief, George Washington, June 15, 1775; to the close of the Revolution. From that date to September, 1780, the army consisted of eight companies of infantry and a battalion of artillery (act of September, 1785) when Brevet Brigadier-General Josiah Harmer, Lieutenant-Colonel commandant of the infantry, was elected, and held until March, 1791. Major-General Arthur St. Clair, March 1791, to March, 1792, when he resigned. Major-General Anthony Wayne, March 1792, to December 15, 1796, when he died at a hut on the bank of Lake Erie, in Pennsylvania, while enroute from Maumee to the East. Brigadier-General James Wilkinson, December 16, 1796 to July 2, 1798. Lieutenant-Colonel George Washington, July 8, 1798, till his death, December 4, 1799. Brigadier-General James Wilkinson (again), June, 1800, to January, 1812, when he was promoted to Major-General. Major-General Henry Dearborn, January, 1813, to June, 1815, when he was mustered out. Major-General Jacob Brown, June, 1815, till his death, February 24, 1828. Major-General Alexander Macomb, May, 1828, until his death, in June, 1841. Major-General Winfield Scott, June 25, 1841, to November 1, 1861, being also Brevet Lieutenant-General from May, 1861. Major-General Geo. B. McClellan, November 1, 1861, to March 11, 1862. Major-General Henry W. Halleck, July 23, 1862, to March 12, 1864. U. S. Grant, (appointed General July, 1866), March 12, 1864, to March 4, 1869. Gen. W. T. Sherman, March 8, 1869, to Nov. 1, 1883. Lieut.-Gen. P. H. Sheridan, Nov. 2, 1883.*

ARTILLERY. There are about 37,000 pieces of cannon, of which only 20,000 can be said to be in use.

COUNTRIES.	Army.	Navy.	Fortifications, Arsenals, etc.	Total.
France	1,983	2,834	2,800	7,572
Germany	2,040	570	2,770	5,380
Russia	2,287	836	2,010	5.124
Great Britain	702	1,480	2,000	4,182
United States	100	1,055	3,000	4,155
Austria	1,540	320	1,000	2,860
Italy	500	480	500	1,480
Spain	348	525	300	1,173
Norway and Sweden	300	672	100	1,072
Turkey	650	200	100	950
Holland	150	560	120	830
Denmark	106	245	170	521
Brazil	50	166	200	416
Japan	120	149	100	369
Portugal	92	178	110	380
Roumania	180	36	94	310
Greece	96	70	110	276
Belgium	204	....	40	244
Total	11,448	10,376	15 524	37,294

At the close of the Franco-German War the Germans took from the French 7,234 pieces of cannon, including 3,485 field pieces and 3,300 fortress guns. At the battle of Waterloo, the British fired 9,467 rounds, or one for every Frenchman killed. The cost of heavy guns is as follows, per ton: Cast iron, $105; Armstrong $500; Krupp, $850; Whitworth, $875.

The initial velocity of guns is as follows: 6-inch rifle, 16 lbs. powder, 35 lbs. shot, 1,917 feet velocity; 7-inch rifle, 13 lbs. powder, 100 lbs. shot, 1,130 feet velocity; smooth-bore, 15 lbs. powder, 104 lbs. shot, 1,254 feet velocity.

ASYLUMS AND HOSPITALS. There are 91,997 insane persons in the United States, of whom, 40,942 are in Asylums and Hospitals; 235 in other institutions; 9,302 in Almshouses; 417 in Jails; 41,101 at home. There are also 1,141 Idiots in hospitals and asylums.

There are 2,158 Blind persons in institutions for the same, and 5,267 Deaf Mutes.

In Canada, there are 13 Lunatic Asylums with 4,055 inmates, and 85 various asylums with 4,431 inmates.

*1887, the Scotch cutter Thistle against the sloop Volunteer. The Scotch cutter beaten September 27 and 30th.

*Maj.-Gen. J. M. Schofield, Aug. 14, 1889.

BALLOONS. The most remarkable ascents on record are:—

DATE.	Aeronaut.	Place of Ascent.	Height, Yards.	Distance, Miles.
1782	Montgolfier	Lyons, France	2,030	
1804	Guy Lussac	Paris, France	7,700	
1836	Holland	London, England		500
1859	Wise	New York, U. S		1,150
1852	Glaisher	Wolverhampton, England	12,000	

During the siege of Paris, September, 1870, to February, 1871, there were 64 balloons sent up, containing 91 passengers, 354 pigeons, and 3 million letters (weighing 9 tons.)

BANANA. It is the most prolific of all fruits of the earth, being 44 times more productive than potatoes, and 131 times more than wheat.

BANKS. There were Oct. 31, 1890, 3,567 national banks in the United States, representing a capital stock of 659 million dollars, a surplus fund of over 213 millions, and undivided profit ninety seven millions. A circulation of 170 millions other liabilities, 2,023 millions; with resources of 2,380 million dollars. Net earnings, 1890, $72,055,560; dividends, $51,158,883. The shares are held by over 200 thousand persons, showing a banking capital of over $3,500 per share-holder.

There are 3,168,950 depositors in the savings banks of the United States, with total deposits of $1,141,530,578; an average to each depositor of $361.30.

The banking of the world has increased since 1884 about eleven-fold—that is, three times as fast as commerce, or thirty times faster than population. The three great foreign banks, with shares, capital, real value and dividends are:

	Bank of England.	Bank of France.	Bank of Germany.
Number of Shares	145,330	18 300	40,000
Capital	$92,714,878	$36,500 000	$30,000,000
Real Value of Shares	234,943,910	115,000,000	45,000,000
Ordinary Dividend	10 per cent.	15 per cent.	6 per cent.

In Great Britain and her colonies, June, 1882, there were 186 banking companies; 120 were English, 10 Scotch, 9 Irish, and 47 Colonial—owned by 88,000 shareholders, with an average capital to each shareholder of $5,000 in Scotland, $3,900 in England, and $3,600 in Ireland.

BANKRUPTCY. In 1870 with 426,000 traders there were 3,551 failures in the United States, with liabilities of 88 million dollars. In 1878, with 693,420 traders, 10,478 failures and 234 million liabilities. In 1886, with 969,841 traders, there were 9,834 failures, 115 million liabilities, or one failure in every 98 traders.

The average failure for five years in the principal countries is shown by the following table:

	No. of Failures.	Amount.	Ratio to Com'rce.
			Per Cent.
United States	5,715	$81,500,000	5½
United Kingdom	13,720	156,500,000	5¼
France	5,580	51,000,000	3
Austria	1,414	9,100,000	1½
Canada	920	13,650,000	8

The number and amount in most countries show a declining ratio compared with trade, perhaps owing to greater caution among merchants.

BARLEY. See *Agricultural Products of the U. S.*

BAROMETER. The mean height of barometer varies according to latitude, as shown in the following table:

Degree of Latitude.	Barometer.	Degree of Latitude.	Barometer.
10	29.89	45	30.00
20	30.06	50	29.81
30	30.11	60	29.90
40	30.02	70	29.67

It varies according to elevation as follows:

	Feet, Above Sea.	Mean Barometer.		Feet, Above Sea.	Mean Barometer.
Sea-Level	0	30.00	Madrid	1,995	27.72
Rome	151	29.66	St. Remy	5,265	34.45
Milan	420	29.45	St. Gothard	6,808	23.07
Moscow	984	28.82	Mexico	7,471	22.52
Geneva	1,221	28.54	Bogota	8,731	21.49
Munich	1,765	27.95	Quito	9,541	20.75

Glashier the aeronaut, in his various ascents reports his barometer marked as follows: 1 mile high, 24 inches; 2 miles 20.3; 3 miles, 16.7; 4 miles, 13.7; 5 miles, 11.3.

BARRENNESS. One woman in 20, one man in 30—that is, about 4 per cent. of the population. It is found that one marriage in 20 is barren—say 5 per cent. Among the nobility of Great Britain, 21 per cent. have no children, owing to intermarriage of cousins, no less than 4½ per cent. of the present nobility being married to cousins. *See Marriage.*

BARRAGES. There are numerous works of this kind on the Seine, Thames, Nile, and other rivers, besides those made by the French in Algeria. At St. Denis du Sig, at the foot of Mount Atlas, there is a "barrage" 50 feet high, built by the French Government at a cost of $100,000. Near it is the Habra, constructed by a French company at a cost of $800,000, for the irrigation of a farm of 100 square miles; the principal breakwater is 130 feet high, 120 thick, and 1,500 feet long, containing 14 million tons of water, yet the sluice can be opened by one man.

BASE BALL RECORDS.—NATIONAL LEAGUE. The following is a record of the number of games won each year by all the clubs enrolled in the National League of Base Ball Clubs since its organization in 1876:—

CLUBS.	1891	1876.	1877.	1878.	1879.	1880.	1881.	1882.	1883.	1884.	1885.	1890.
Chicago	82	52	18	30	44	67	56	55	59	62	87	83
Detroit	..	..	..	..	..	..	41	42	40	28	41	..
New York	71	21	..	..	..	..	..	..	46	62	85	63
Philadelphia	68	14	..	..	..	..		..	17	39	56	78
Boston	87	39	31	41	49	40	38	45	63	73	46	76
St. Louis	..	45	19	..	..	..	..	..	.	.	38	..
Brooklyn	61	..	.	..	..	..	..	.	..	..	..	86
Pittsburgh	55	..	..		..	..	..	.		.	.	23
Providence	..	..	..	38	55	52	47	52	58	84	53	.
Buffalo	..	..	..	..	41	24	45	45	52	64	38	..
Cleveland	65	..	..	..	24	47	36	42	55	35	..	42
Troy	..	..	..	..	19	41	39	35	..	..	..	..
Worcester	..	..	..	..	..	40	32	18		.	..	..
Cincinnati	56	9	..	37	38	21	..	..	..	..	..	77
Syracuse	..	..	..	..	15	..	.	..	..	.	..	..
Indianapolis	..	..	..	24	..	.	..	..	..	..	..	..
Milwaukee	..	..	..	15	..	..	..	.	..	..		..
Hartford	..	47	24	..	..	..	.	.	..	.	..	..
Louisville		30	28	..	..	..	..		..			

NOTE.—The New York nine in 1876 were the old Mutuals, who had played every season from about 1858, first at Hoboken and afterwards on the Union grounds, Brooklyn, E. D. In 1879 the Troy nine were organized, and they played together until their transfer to New York in 1883, when they inaugurated base ball at the Polo Grounds.

The Philadelphia nine, in 1876, were known as the Athletics, who subsequently played in the American Association, and afterwards returned to the National League.

The Providence nine were originally the Hartford nine.

AMERICAN ASSOCIATION.

The record of the number of games won by the several clubs forming the American Association of Base Ball Clubs since its organization is as follows:—

CLUBS.	1882	1883	884	1885	1890
St. Louis	37	65	67	79	77
Pittsburgh	39	39	30	56	..
Brooklyn	..		40	53	..
Louisville	42	52	68	53	88
Cincinnati	55	62	68	63	..
Athletic, of Philadelphia	41	66	61	55	55
Metropolitan, of New York	..	54	75	44	
Baltimore	19	28	63	41	39
Columbus	..	32	69	.	79
Toledo	..	..	46	..	68
Virginias, of Richmond	.	..	12	..	..
Syracuse	.	..	29	.	55
Rochester	..	..	12		60

PLAYERS' LEAGUE, 1890.

	Won.	Lost.	Per cent.
Boston	81	47	63.28
Brooklyn	76	56	57.57
New York	74	57	56.49
Chicago	75	62	54.74
Philadelphia	68	65	51.13
Pittsburgh	60	68	46.87

Between Oct. 17 and 28, 1890, the Brooklyn and Louisville Clubs, champions respectively of the National League and American Association, played a series of games at Louisville and Brooklyn, announced as the "world's championship." The Brooklyns won three games by scores of 9 to 0, 5 to 3 and 7 to 2, while the Louisvilles won three by scores of 5 to 4, 9 to 8 and 6 to 2, and one ended in a tie, 7 to 7. Cold weather caused the series to end in a draw.

BATTLES. The number placed *hors-de-combat* are not relatively so large in European wars as formerly:

	Men Engaged.	Hors-de-Combat.	Ratio per cent.		Men Engaged.	Hors-de-Combat.	Ratio per cent.
Thrasymene	65,000	17,000	27	Gravelotte	320,000	48,500	15
Cannæ	146,000	52,000	34	Buena Vista	21,700	3,000	11
Bannockburn	135,000	38,000	28	Contreras	11,000	2,600	24
Agincourt	62,000	11,400	18	Pittsburg L'ding.	85,000	25,000	30
Cressy	117,000	31,300	27	Antietam	150,000	28,368	25
Marengo	58,000	13,000	22	Stone River	105,000	36,578	35
Austerlitz	170,000	23,000	13	Chickamauga	115,000	34,655	32
Borodino	250,000	78,000	31	Wilderness	190,000	49,137	26
Waterloo	145,000	51,000	35	Chancellorsville	130,000	24,000	19
Alma	103,000	8,401	8	Gettysburg	165,000	53,186	32
Sadowa	402,000	33,000	8				

Official statistics show that the number of casualties in the volunteer and regular armies of the United States during the war of 1861-5, were: Killed in battle, 61,362; died of wounds, 34,727; died of disease, 183,287; total died, 279,376; total deserted, 199,105. The number in the Confederate service that died of wounds or diseases (partial statement), 133,821; deserted, 104,428. Number of Federal troops that died while prisoners, 29,725; Confederate troops that died while prisoners, 26,774. Federal troops paroled on the field, 16,431; Confederate troops paroled on the field, 248,599. Number of Federal troops captured during the war, 212,608; Confederate troops captured, 476,169. Estimated cost of the war, direct and indirect, $6,189,929,908.

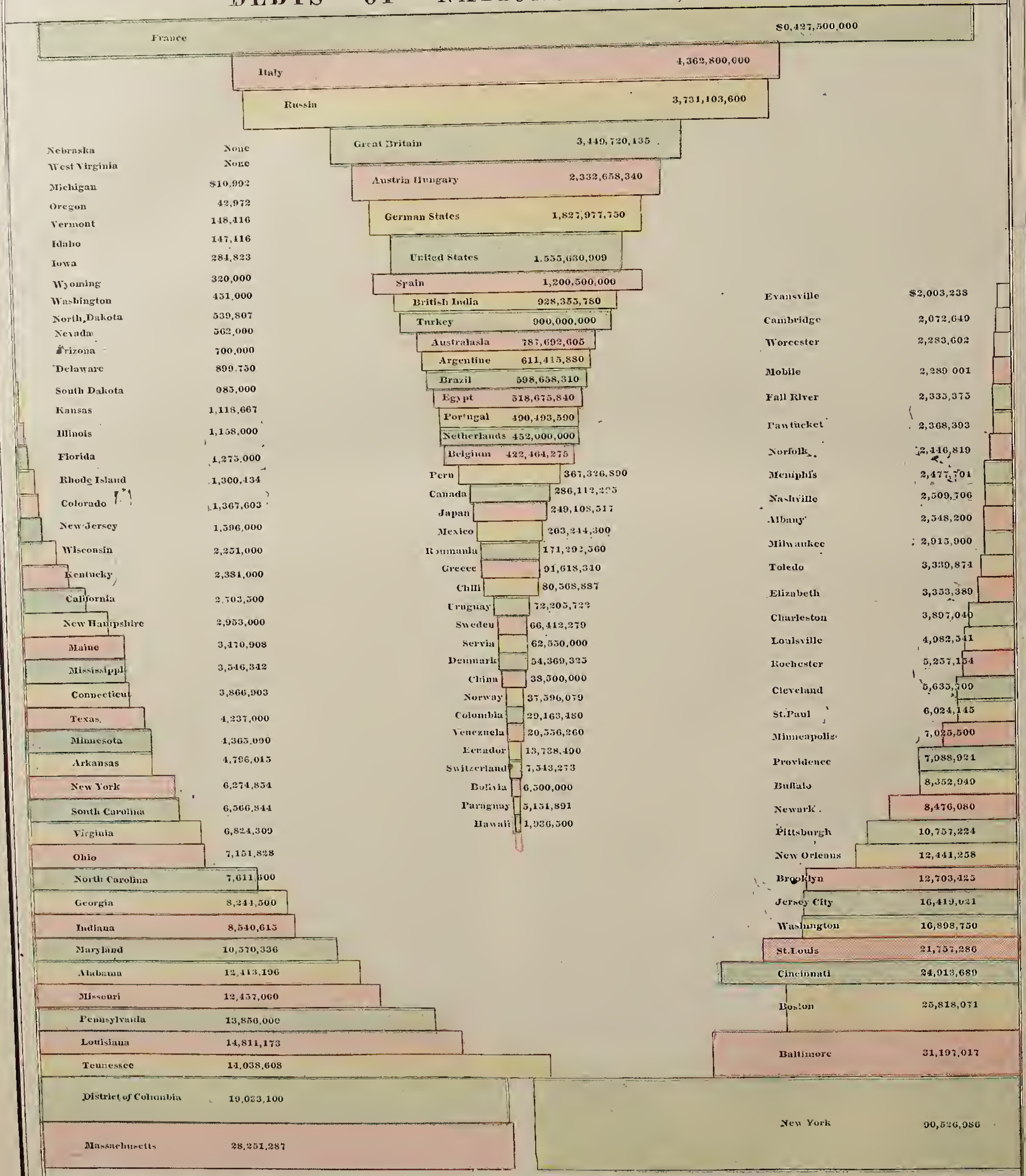
BEEF.—See *Meat.*

BEER.—In 1890 there were 2,144 establishments engaged in manufacturing malt liquors, with 91 million dollars capital, employing 26,220 hands, paying annually over 12 million dollars in wages. Annual value of production 101 million dollars. The quantity of beer (including ale) brewed in various countries yearly with the consumption *per capita* of population, is given in the following table As no account is taken of the quantity imported into or exported from each country in these figures, it is to be presumed that this element would modify the result as to certain countries. No report for 1890.

(MULHALL'S DICTIONARY OF STATISTICS.)

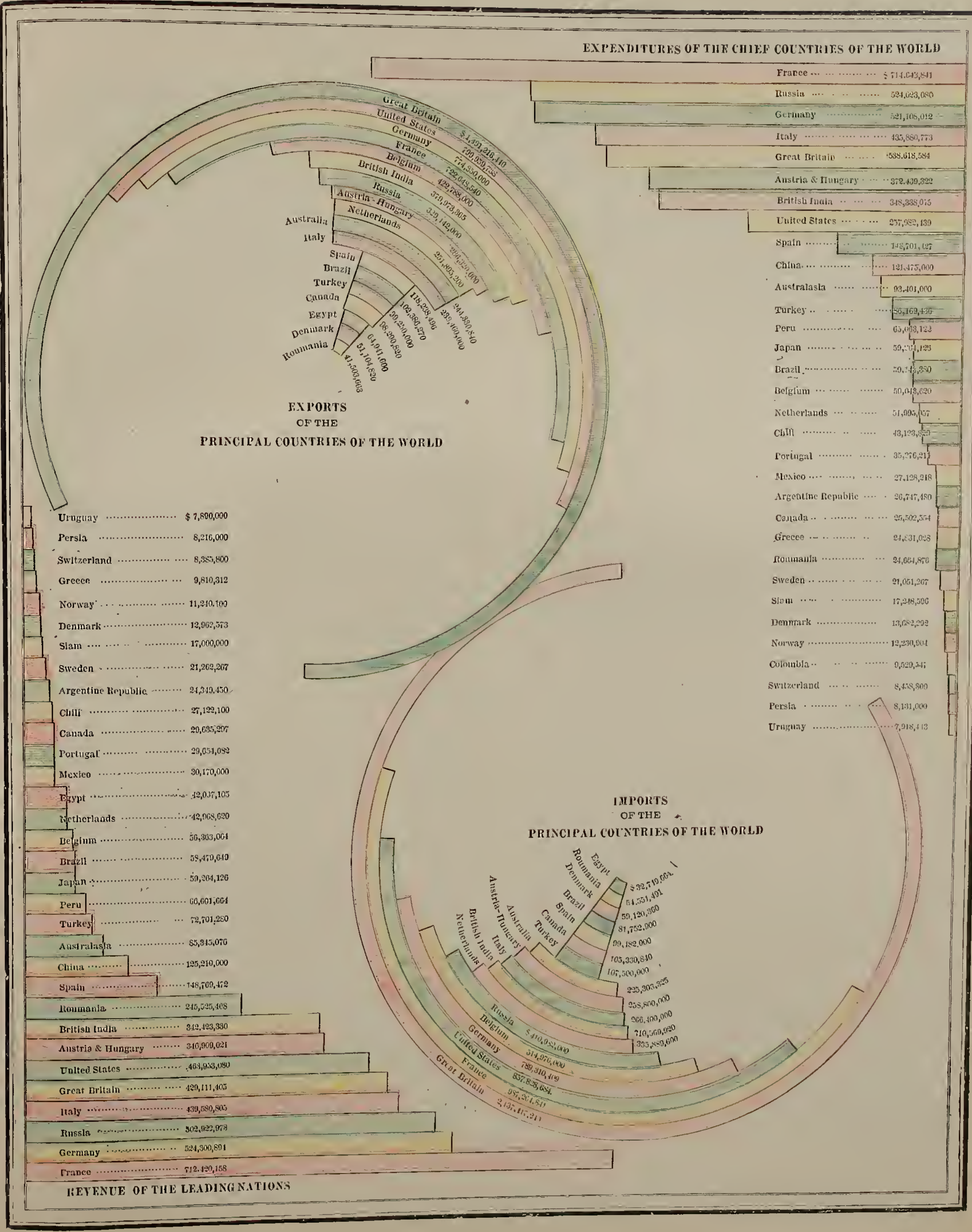
	Number of Breweries.	Quantity Brewed.	Consumption per head.		Number of Breweries.	Quantity Brewed.	Consumption per head.
		Gallons.	Gallons.			Gallons.	Gallons.
United States	3,293	340,000,000	6.6	Now'y&Swed'n	640	35,000,000	5.8
Belgium	2,500	170,000,000	31.5	Austria	2,297	215,000,000	6.4
Great Britain	16,114	1,025,000,000	29.0	Switzerland	400	16,000,000	5.6
Germany	23,940	880,000,000	19.1	France	3,100	190,000,000	5.2
Denmark	240	25,000,000	13.0	Russia	460	63,000,000	0.5
Netherlands	530	35,000,000	8.5	Italy	200	20,000,000	0.3

DEBTS OF NATIONS JAN. 1, 1891.



GROSS DEBTS OF STATES JAN. 1, 1891.

NET DEBTS OF CITIES ABOVE $2,000,000


EXPENDITURES OF THE CHIEF COUNTRIES OF THE WORLD
France $ 714,043,841
Russia 524,023,080
Germany 521,108,012
Italy 435,880,773
Great Britain 538,618,584
Austria & Hungary 372,439,322
British India 348,338,075
United States 257,982,439
Spain 148,701,027
China 121,475,000
Australasia 93,401,000
Turkey 86,169,436
Peru 65,063,122
Japan 59,264,125
Brazil 59,343,380
Belgium 50,043,620
Netherlands 51,095,057
Chili 43,123,850
Portugal 35,276,211
Mexico 27,128,218
Argentine Republic 26,747,480
Canada 25,502,554
Greece 24,831,028
Roumania 24,664,876
Sweden 21,051,267
Siam 17,248,596
Denmark 13,682,292
Norway 12,230,904
Colombia 9,529,547
Switzerland 8,458,800
Persia 8,131,000
Uruguay 7,918,413
EXPORTS OF THE PRINCIPAL COUNTRIES OF THE WORLD
Great Britain $1,491,216,410
United States 799,959,735
Germany 774,350,000
France 722,048,540
Belgium 422,788,000
British India 379,978,805
Russia 329,142,000
Austria-Hungary 266,320,000
Netherlands 251,805,200
Australia 244,330,840
Italy 239,460,000
Spain 118,238,496
Brazil 102,380,270
Turkey 90,250,000
Canada 68,290,820
Egypt 64,941,600
Denmark 51,104,820
Roumania 41,503,663
IMPORTS OF THE PRINCIPAL COUNTRIES OF THE WORLD
Egypt $32,719,664
Roumania 54,551,401
Denmark 59,120,360
Brazil 81,752,000
Spain 99,182,000
Canada 105,330,840
Turkey 107,500,000
Australia 225,303,325
Austria-Hungary 258,800,000
Italy 266,400,000
British India 310,560,920
Netherlands 335,880,600
Russia $410,082,000
Belgium 514,976,000
Germany 789,310,409
United States 837,828,684
France 987,264,840
Great Britain 2,137,415,211
REVENUE OF THE LEADING NATIONS
Uruguay $ 7,800,000
Persia 8,216,000
Switzerland 8,385,800
Greece 9,810,312
Norway 11,240,100
Denmark 12,962,573
Siam 17,000,000
Sweden 21,262,267
Argentine Republic 24,349,450
Chili 27,122,100
Canada 29,635,207
Portugal 29,054,082
Mexico 30,170,000
Egypt 42,007,105
Netherlands 42,968,620
Belgium 56,303,064
Brazil 58,470,640
Japan 59,264,126
Peru 66,601,664
Turkey 72,701,280
Australasia 85,345,076
China 125,210,000
Spain 148,769,472
Roumania 245,525,408
British India 342,423,330
Austria & Hungary 340,909,021
United States 463,953,080
Great Britain 429,111,405
Italy 439,580,805
Russia 502,922,978
Germany 524,300,891
France 712,420,158

BEES. Mulhall states that a hive of 5,000 bees produces about 50 lbs. of honey yearly, and multiplies tenfold in five years. Bees eat 20 lbs. of honey in making a pound of wax. The largest bee owner in the world is Mr. Harbison, of California, who has 6,000 hives, producing 200,000 lbs. honey yearly, worth $40,000. There are in the United States 70,000 bee-growers, but the average which they get from their hives is only 22 lbs., whereas the average in England is 50 lbs., and some hives have given as high as 120 lbs.

BEET ROOT. The production of beet root is largely confined to Europe. Experimental growing in Canada and the United States has proved most successful. The crop ranges from 5 tons of roots per acre in Russia to 9 tons in Germany. In England it has given 12 tons per acre, but it has been found too costly in cultivation. It takes about 14 tons of roots generally, per ton of beet sugar—the average of saccharine matter being 7 per cent.

BELLS. The largest are the following, their weight is given in tons: Moscow, 202; Burmah, 117; Pekin, 53; Novgorod, 31; Notre Dame, 18; Rouen, 18; Olmutz, 18; Vienna, 18; St. Paul's, 16; Westminster, 14; Montreal, 12; Cologne, 11; Oxford, 8; St. Peter's, 8.

Bell metal should have 77 parts copper and 23 tin.

BENEFACTIONS, Educational. See *Funds.*

BIBLE. No fewer than 1326 editions of the Bible were published in the 16th century. In the 17th and 18th centuries it was translated and published in many languages by the polyglot press of Propaganda Fide at Rome. In the 19th century the English and American societies have printed, in the Protestant version 220 million copies of the Bible or the New Testament, viz: British 132 millions, American, 52 millions; other societies, 36 millions.

BILLS OF EXCHANGE. The report of the Comptroller shows that 95 per cent. of the business exchanges of the United States are in the shape of checks, drafts, etc., as shown by the following table:

PROPORTION OF CHECKS TO CURRENCY, ETC., IN BUSINESS EXCHANGES.

	No. of Banks	Receipts.	PROPORTIONS.			
			Gold Coin.	Silver Coin.	Paper Currency	Checks, Drafts.
New York City....	48	$167 437.759	0.27 per cent.	0.01 per cent.	1.02 per cent.	98.70 per cent.
Other reserve cities	187	77,100,715	0.76 "	0 15 "	4 71 "	94.38 "
Banks elsewhere.	1,731	40,175,542	2.04 "	0 77 "	15.47 "	81.72 "
Total United States	1.966	$284.714.016	0.65 "	0.16 "	4.06 "	95.13 "

The proportion of checks compared with notes and coin in London is of the former 98.9, the latter 1.1. The checks paid in New York and London in one month aggregate over 70 thousand million of dollars—which is largely in excess of all the gold and silver coin in existence.

BIRDS, Flight of The hawk flies 150 miles per hour; the eider duck, 90; the rook 60, and the pigeon 50. In 1877 the newspaper *Nationale,* of Paris, had 16 carrier pigeons which carried dispatches daily between Versailles and Paris in 15 and 20 minutes. In November, 1882, some pigeons, in face of strong wind, made the distance of 160 miles from Canton Vaud to Paris, in 6½ hours, or 25 miles per hour.

BIRDS-NESTS. In China birds' nests are largely used for soup—no less than 9 million being imported annually into Canton, valued at $2.50 per ounce; about 50 weighing one pound.

BIRTHS. The following table gives the number of births in all countries:

	Daily.	One Year.	Excess over Deaths.
United States	5.750	2 100,000	950,000
England	2,441	880,530	352,460
Scotland	342	124,652	48 850
Ireland	353	128.010	25,055
Canada	384	140.000	60.000
Australia	301	109,000	66,000
France	2,561	936,000	97,000
Germany	4,750	1,735,000	592,000
Russia	8,525	3.116,000	779,000
Austria	2,328	1,486,000	324 090
Italy	2,810	1,064,000	228,000
Spain	1,620	592,000	115,000
Portugal	407	150,000	30,000
Holland	391	144,000	49.000
Belgium	471	172.000	48,600
Denmark	171	62.500	24,000
Sweden	380	139 000	62,000
Norway	158	58,000	29,000
Switzerland	236	86,000	20 500
Greece	195	72,000	17.000
Roumania	495	180,000	40,000
Total	37.169	13.475,682	3,957,465

The greatest increase of fertility from 1870 to 1880 was in Ireland, the greatest decline in Sweden. The average per cent. of twins to 1,000 births is from 8 to 17 per cent. Twins give 108 males to 100 females. The ratio of illegitimacy ranges from 16 per 1,000 births in Greece to 129 in Austria. Families living in the country have 8 per cent. more children than those in towns. Among Jews there are 116 males born to 100 females. Their ratio of illegitimacy is the lowest in the world, barely 2 per cent. After a destructive war the birth of males predominates in a surprising manner.

BISON, or American Buffalo—During the twenty years prior to 1882 over 15 million buffaloes were killed in the United States. There are 72,000 buffaloes in Austria-Hungary.

BLACKSMITHING. The United States census of 1880 gives 28,101 establishments; capital employed, $19,600,000; hands, 34,526; value of products, $43,700,000.

BLIND. The total number in Europe and America is 224,245, distributed as follows: Great Britain, 33,896; Spain, 35,290; France, 28,491; Germany, 26,170; Austria, 32,336; Switzerland, 2,640; Italy, 28,100; Belgium, 4,182; Holland, 2,410; Sweden, 4,120; Norway, 3,730; Denmark, 2,450; United States, 20,430; Canada, 3,017. The greatest percentage is in Spain, the smallest in the United States. See *Schools for the Blind.*

BLOOD. The elements of the human blood are, in man, water, 77.8; albumen, 6.2; color, 14.1; saline, etc., 1.9; total, 100. In woman, water, 79.6; albumen, 6.4; color, 12.2; saline, etc., 1.8. The natural temperature in man, 98½ degrees. The amount of iron in the blood of a man is 0.91 oz. per cwt. The heart beats 74 times per minute, sending each time 10 lbs. of blood through the veins and arteries; the human system of an adult averages 28 lbs. of blood.

BONDS. The following table gives the total outstanding bonds of the United States, Oct. 31, 1890.

Character of Issue.	Authorizing Act.	When Payable.	Interest Periods.	Amount Outstanding.		
				Registered.	Coupon.	Total.
				Dollars.	Dollars.	Dollars.
3s of 1882	July 12, 1882	Option of the United States.	Q.—A.	63,899,000	......	194,190,500
4½s of 1891	1870 and 1871	Sept. 1, 1891	Q.—M.	203,057,800	49,942.200	250 000,000
4s of 1907	1870 and 1871	July 1, 1907	Q.—J.	616,434,850	121,347,000	737,781,850
4s. ref. ctfs	Feb. 26, 1879	....	....			190,100
3s. navy p.fd	July 23, 1868	....	....			14,000,000
Bonds Issued to Pacific Railroad.				64,623,512	......	64,623,512
Aggregate				948,015,162	117,289,200	1,260,785,962

BOOKS. The earliest book known, printed with movable metal type, is a folio Latin Bible, published at Mentz, about A. D. 1455. The edition consisted of 300 copies—mostly printed on vellum. As each Bible contained 641 leaves, it required the skins of more than 300 animals for every copy. About 100 new books are published daily, or 30,000 per annum, without counting new editions of old works. The average edition of a book being 1,000 copies. It appears from the following statement that the four countries mentioned print 30 million volumes of new books yearly. The annual average of new books in the United States is 2,500; Great Britain, 5,771; Germany, 14,560; France, 7,000. Great Britain exported books in 1880 to the value of $4,850,000.

BOOKBINDING. In 1880 there were in the United States 588 establishments, with capital of $5,700,000, employing 10,612 hands, value of production $11,900,000.

BOOTS. The American machine enables a man to make 300 pair of boots daily. A single factory in Massachusetts turning out as many pairs yearly as 32,000 bootmakers in Paris. The first machines were made in 1862—15 in number—they have increased until there were, in 1880, 3,100 machines in use turning out 150 million pairs of boots annually. 125,478,511 pairs of boots and shoes were manufactured in the United States in 1880, nearly 80 millions of which were manufactured in Massachusetts. There are 17,972 manufacturing establishments in the United States, captial employed, $54,300,000; hands, 133,819; value of products $196,900,000.

BOUNTIES. During the civil war the United States Government paid out $38,522,046 as bounty to volunteers and regulars on enlistment; $81,760,345 to volunteers and their widows and legal heirs; $69,998,786 additional bounty, act of July 28, 1866; $268,158 for collection and payment of bounty to colored soldiers. The several States paid $285,941,036 in bounties.

BRAIN. The latest classification of races according to Bastian and other experts shows the weight of the brain in ounces as follows: Scotch, 50.0; German, 49.6; English, 49.6; French, 47.9; Zulus, 47.5; Chinese, 47.2; Pawnees, 47.1; Italians, 46.9; Hindoo, 45.1; Gypsy, 44.8; Burhman, 44.6; Esquimaux, 43.9.

Compared with size of body the Esquimaux is as heavy as the Scotchman's.

The measurement of that part of the skull which holds the brain is stated in cubic inches, thus: Anglo Saxon, 105; German, 105; Negro, 96; Ancient Egyptian, 93; Hottentot, 58; Native Australian, 58. In all races the male brain is about ten per cent. heavier than the female. The highest class of Apes has only 16 oz. of brain.

After the age of 50 the brain loses an ounce every 10 years. Cuvier's weighed 64, Byron's 79, Cromwell's 90, but the last was diseased.

BREAD. The analysis of bread gives different results, water and starch being the chief ingredients, each being from 35 to 50 per cent.

A *sack* of flour containing 280 lbs. will make 420 lbs. of bread in the United States, and 368 lbs. in England; that is, 7 lbs. of American are equal to 8 lbs. of English flour. The consumption of bread in pounds each week per inhabitant is United States, 7.5; Great Britain, 6.3; Germany, 11.2; France, 9.7; Russia, 9.4; Austria, 6.0. General average throughout the world, 8.5.

BREAKWATER. The following are the principal breakwaters:—

Name.	Date.	Yards long.	Cost.	Name.	Date.	Yards long.	Cost.
Plymouth, Eng.	1812–1814	1,720	$7,750,000	Delaware, U. S.	....	1,200	....
Cherbourg, Ger'y	1784–1857	4,100	16,000,000	Alexandria, Ey't	1873–1876	2,000	12,750,000

The Plymouth Breakwater has the same quantity of stone, 6,800,000 tons, as the great pyramid of Cheops, and encloses 1,120 acres of harbor, Cherbourg, 1,927 acres, and Delaware, 420 acres.

BRICKS. The consumption in the United States is over six hundred millions montbly, against two hundred and fifty millions in Great Britain and Colonies, that is, 130 bricks yearly in the United States to 90 in Great Britain, are used annually for each inhabitant. An Adams or Liddell machine, 10 horse power, can make 30,000 bricks daily—the average of hand made bricks per moulder being 4,000 a day. Fire bricks will resist a crushing force varying from 600 to 3,000 pounds per square inch.

BRIOGES. The great Historical Bridges of the world, as given by Mulhall, are as follow:—

Date.	Name.	Over.	Length, Feet.
1235	Ratisbon	Danube	994
1285	St. Esprit	Rhone	2,690
1301	Cordoba	Guadalquivir	460
1354	Verona	Po	363
1588	Rialto	At Venice	99
1650	Prague	Moldau	1,706
1758	Schaffhausen	Rhine	364
1768	Neuilly	Seine	740

The bridges of great height are, in feet, Menai, 102; Niagara, 190; Brooklyn, 210; Cantilever, Niagara, 245; Annecy, 656.

The remarkable Iron Bridges ot the world are as follows:—

Date.	Bridge.	Over.	Length, Feet.	Iron, Tons.	Cost.	Builder.
1779	Coalbrookdale	Severn	900	378	......	Darby.
1796	Sunderland	Wear	236	260	$ 135,000	Wilson.
1819	Southwark	Thames	800	5,780	4,000,000	Rennie.
1825	Menai	Menai Straits	1,0'0	2.187	1,050,000	Telford.
1849	Newcastle	Tyne	900	5.050	1,215.000	Stephenson.
1850	Britannia	Menai Straits	1,511	9,000	3,010,000	Stephenson.
1855	Niagara	Niagara	850	400	415 000	Roebling.
1859	Victoria	St. Lawrence	7,200	8,230	8,500,000	Stephenson.
1860	Pesth Buda	Danube	1,900	7,000	......	......
1862	Freyburg	Sarine	1.095	3,100	500,000	......
1867	Cincinnati	Ohio	2.252	......	......	Roebling.
1868	Clifton	Niagara	1.270	......	200,000	......
1874	St. Louis	Mississippi	2,200	4,200	2,000,000	Eads.
1875	Wezerabad	Punjaub	9.300	....	3,250,000	......
1877	Oporto	Douro	1.160	1,600	......	Eiffel.
1878	Annan	Solway	5.120	....	......	......
1879	Empress	Sutlej	6,000	6,650	2,7?0,000	......
1880	Moerdyk	Maas	4.850	......	......	......
1880	Pultowa	Dnieper	3,5?0	......	......	......
1881	Saratov	Volga	4.872	5,150	3,475 000	Beleloubski.
1882	Benares	Ganges	3.000	....	2,125,000	......
1883	Brooklyn	East	6,000	34,000	15,500,000	Roebling.
1885	Cantilever	Niagara	895	......	......	......

The Brooklyn bridge was completed at a cost of $15,500,000, having taken 17 years in construction, during which 20 lives were lost, including the contractor (Roebling). Length, 6,000 feet; width, 85; height above water, 135; weight, 34,000 tons. There are 3,200 tons wire; section, 580 square inches; strength, 75 tons per square inch. There are two towers 274 feet high, and 1,600 feet apart. The central way is 15 feet wide for pedestrians, each of the railways has 16 feet width, and each of the ways for wagons, horses, etc., 18 feet. In 1880 the great bridge was crossed by 27,436,707 persons, of whom 2,965,400 walked; the receipts were $755,690,

The Forth bridge (Scotland) is to cost $7,500,000; main girder, 5,330 feet; total length, 2,700 yards; heaviest train deflection, 4 inches; wind pressure of 30 pounds per square foot will bend bridge 9 inches aside; superstructure, 42,000 tons of steel; approach, 3,000 tons of iron, and 125,000 cubic yards of masonry.

A bridge of great magnitude is proposed at Rio Janeiro; length, 16,000 feet; to cost $8,000,000; connecting that city with Nitherhoy, and resting on an intermediate island. Iron bridges cost from $500 upward per lineal foot.

BUCKWHEAT. See *Agricultural Productions.*

BUFFALO. See *Bison.*

BUILDERS, Facts for. 1,000 shingles, laid 4 inches to the weather, will cover 100 square feet of surface, and 5 lbs. of shingle nails will fasten them on.

One-fifth more siding and flooring is needed than the number of square feet of surface to be covered, because of the lap in the siding and matching.

1,000 laths will cover 70 yards of surface, and 11 lbs. of lath nails will nail them on. Eight bushels of good lime, 16 bushels of sand, and 1 bushel of hair, will make enough good mortar to plaster 100 square yards.

A cord of stone, 3 bushels of lime, and a cubic yard of sand will lay 100 cubic feet of wall.

Five courses of brick will lay 1 foot in height on a chimney, 10 bricks in a course will make a flue 4 ins. wide and 12 ins. long, and 8 bricks in a course will make a flue 8 ins. wide and 16 ins. long.

Cement 1 bushel and sand 2 bushels will cover 3¼ square yards 1 inch thick, 4½ square yards ¾ inch thick, 6¾ square yards ½ inch thick. 1 bushel cement and 1 of sand will cover 2¼ square yards 1 inch thick, 3 square yards ¾ inch thick, and 4½ square yards ½ inch thick.

BUILDINGS. The capacity of the great Assembly rooms of the old and new world: Coliseum, Rome, 87,000; St. Peter's, Rome, 58,000; Cathedral, Milan, 40,000; Theatre of Pompey, Rome, 40,000; T. of Marcellus, Rome, 20,000; St. Paul's, Rome, 38,000; St. Paul's, London, 31,000; St. Petronia, Bologna, 20,000; Cathedral, Antwerp, 25,000; Cathedral, Florence, 23,500; St. John's Lateran, Rome, 23,000; St. Sophia's, Constantinople, 23,000; Notre Dame de Paris, 13,000; Cathedral, Pisa, 13,000; St. Stephen's, Vienna, 12,400; St. Dominic's, Bologna, 12,000; St. Peter's, Bologna, 11,400; Cathedral, Vienna, 11,000; Mormon Temple, Salt Lake City, 10,000; Auditorium, Chicago, 9,000; St. Mark's, Venice, 7,500; Gilmore's Garden, New York, 8,443; Bolshoi Theatre, St. Petersburg, 5,000; Music Hall, Cincinnati, 4,824; La Scala, Milan, 4,000; University Hall, Ann Arbor, 3,500; San Carlos, Naples, 3,600; Columbia Theatre, Chicago, 2,072; Music Hall, Boston, 2,585; Academy, Paris, 2,092; Imperial, St. Petersburg, 2,160; Covent Garden, London, 2,684; Grand Opera House, New Orleans, 2,052; St. Charles Theatre, New Orleans, 2,178; Grand Opera House, New York, 1,883; Booth's Theatre, New York, 1,807; Opera House, Detroit, 1,790; McVicker's Theatre, Chicago, 1,786; New Music Hall, Chicago, 1,786.

For *High Buildings*, see Colored Diagram, page 51.

BULLET. Velocity of smooth bores, 110 grains of powder, 1,500 feet per second, Rifle, 60 grains of powder, 963 feet per second.

BULLION. See *Coin.*

BUTTER. The world's annual production in thousand tons is 1055, of which the United States produces one-third, or 777,250,287 lbs.; and 27,272,489 lbs. of cheese. An American cow giving 1,800 quarts milk per annum, produces 140 lbs. butter. During the year she eats 8,000 lbs. hay, which contain 168 lbs. fat.

The amount of butter and cheese obtainable from milk:

100 lbs. milk contains about	3	lbs.	pure butter.
100 " " " "	7.8	"	cheese.
100 " " averages about	3.5	"	common butter.
100 " " " "	11.7	"	common cheese.
100 " skim milk yields "	13.5	"	skim milk cheese.

The time required for the full amount of cream to rise to the surface of new milk at different temperatures may be seen from the following table:—

10 to 12	hours if the temperature of the air is	77°	Fahr.
18	" " " "	68°	"
24	" " " "	55°	"
36	" " " "	50°	"

See *Cheese.*

CABINETS. See *Presidents.*

CALENDAR. The two natural divisions of time are the day, of 24 hours, representing one revolution of the earth on its axis, and the year, 365 days, approximately representing one revolution of the earth around the sun. The month represents (nearly) the period of the moon's revolution round the earth (about 29½ days), while the week is approximately one-fourth of this.

By the Julian Calendar, established by Julius Cæsar, 46 B. C., the months were reconstructed; and the Roman year was regulated entirely by the sun, the lunar year being abolished. Thirty-one days were given to the 1st, 3d, 5th, 7th, 8th, 10th and 12th months, and 30 days each to the rest, except February, which on every fourth year received an intercalary day, made by the *sexto Calendas Martii*: whence "leap-year" came to be called *Bissextile*. As the Julian year had 365¼ days, its length exceeded the true solar year by 11 m. 14 sec., so that the equinox in the course of centuries fell back several days. To correct this error Pope Gregory XIII. in 1582 reformed the calendar by suppressing ten days, restoring the equinox to March 21. The Gregorian Calendar also made every year, which is divisible by four without a remainder, a leap year, except the centesimal years, which are only leap years when the first two figures are divisible by four; thus 1,600 was a leap year, 1,700, 1,800 and 1,900 common years, 2,000 a leap year, etc. The length of a mean year is 365d. 5h. 49m. 12sec., exceeding the true solar year nearly 26 sec., which error amounts only to one day in 3,325 years.

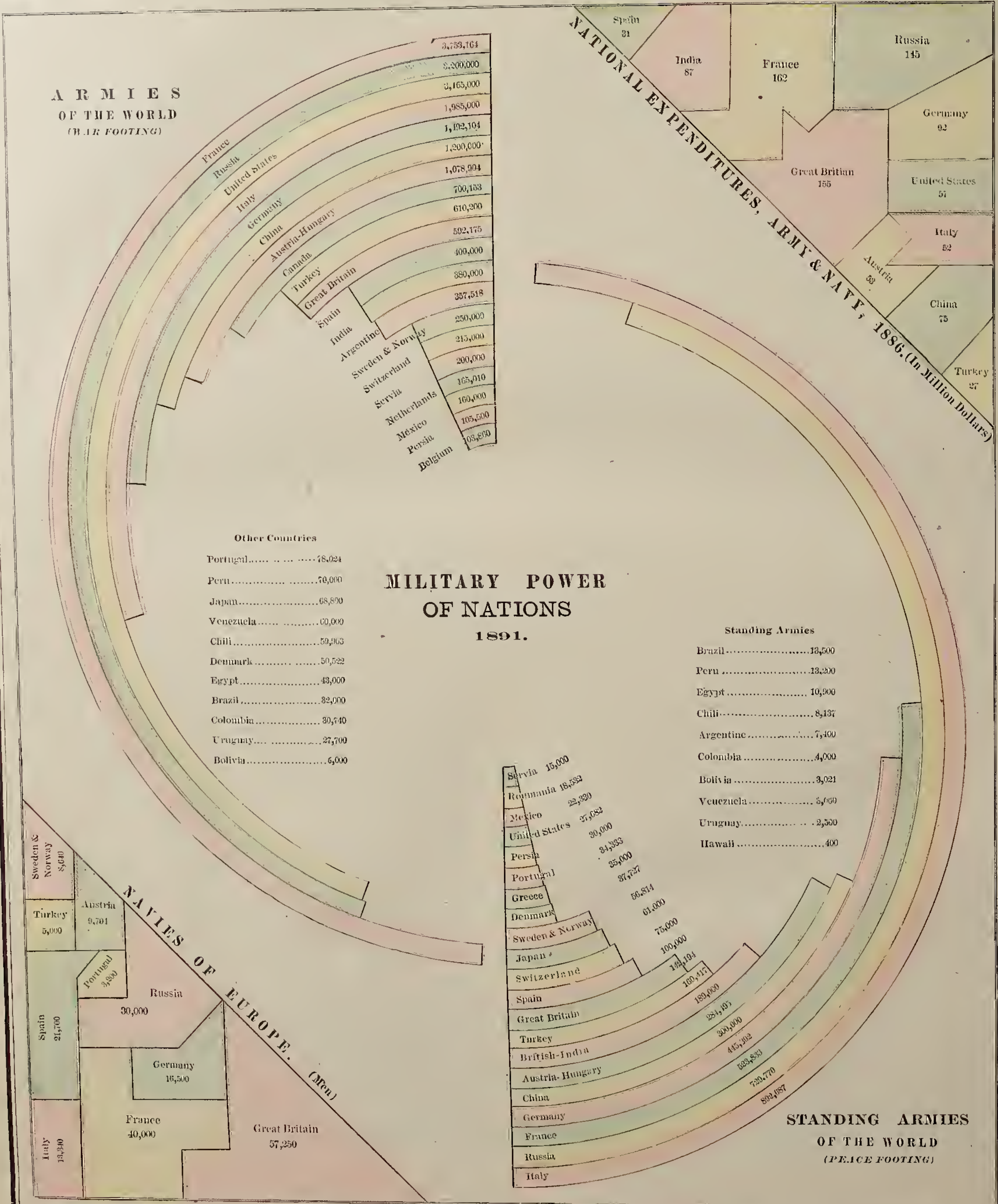
The Gregorian Calendar was adopted by Germany in 1,700, and by English law in 1,752, when the Julian Calendar, or *old style*, gave place to the *new style*, by dropping eleven days from the month of September, 1752.

1. Jewish, 383 days; the Jewish year 5647 began on September 20, 1886.
2. Julius Cæsar's, 365 days, B. C., 46, commenced in March.
3. Mahometan, 355 days, A. D. 622; the Mahometan year 1303 began Feb. 19, 1884.
4. Charles IX, A. D. 1564, commenced January 1.
5. Pope Gregory XIII., 1582; now universally used except in Russia.
6. The Russian year begins on January 13 of our calendar.

The festival of Easter, commemorating the resurrection of Christ, used to be observed on the 14th day of the moon, *i. e.*, near the full moon—the same as the Jewish Passover. But the Council of Nice, A. D., 325 ordered Easter to be celebrated on the Sunday next succeeding the full moon that comes on or next after the vernal equinox—March 21st; thus making Easter and the related feast and fast days movable holidays.

CAMELS. A camel has twice the carrying power of an ox; with an ordinary load of 400 pounds he can travel 12 or 14 days without water, going 40 miles a day. Camels are fit to work at 5 years old, but their strength begins to decline at 25, although they live usually till 40. They are often fattened at 30 for the butcher, the flesh tasting like beef. The Tartars have herds of these animals, often 1,000 belonging to one family. They were numerous in antiquity, for the patriarch Job had 3,000. The Timbucto or Meharri breed is remarkable for speed, and used only for couriers, going 800 miles in 8 days with a meal of dates or grain at nightfall. Napoleon conveyed 1,500 infantry on camels across the desert from Cairo to St. Jean d'Acre.

Camel, in engineering, signifies an instrument invented by the Dutch for floating vessels over sand banks. The vessels sunk at Sebastopol in 1854 were removed after the war by means of Colonel Gower's camels, which had a lifting power of 5,000 tons.



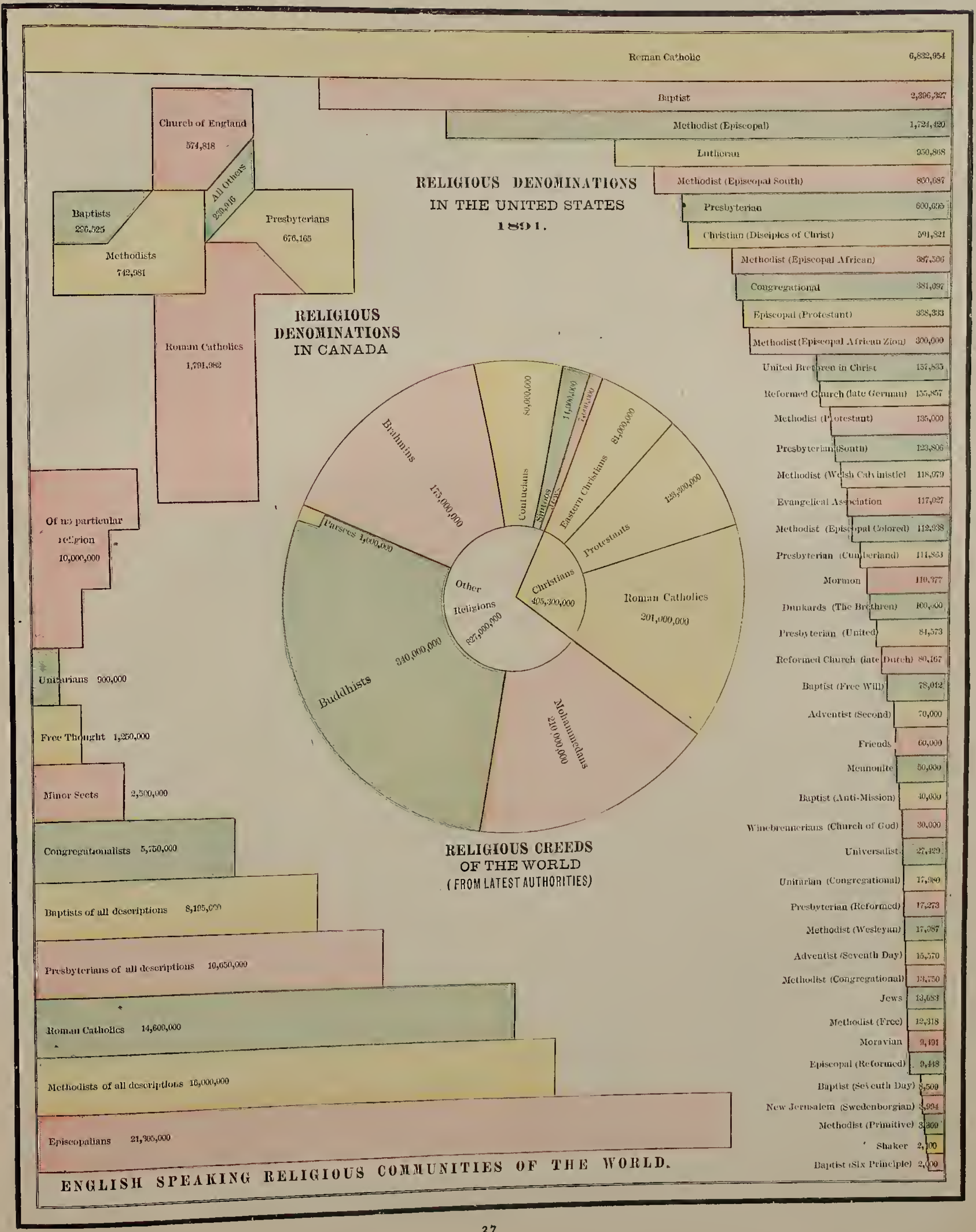
MILITARY POWER OF NATIONS
1891.

Other Countries

Portugal	78,024
Peru	70,000
Japan	68,800
Venezuela	60,000
Chili	59,963
Denmark	50,522
Egypt	43,000
Brazil	32,000
Colombia	30,740
Uruguay	27,700
Bolivia	6,000

Standing Armies

Brazil	13,500
Peru	13,200
Egypt	10,900
Chili	8,137
Argentine	7,400
Colombia	4,000
Bolivia	3,021
Venezuela	3,000
Uruguay	2,500
Hawaii	400



RELIGIOUS DENOMINATIONS IN THE UNITED STATES 1891.

RELIGIOUS DENOMINATIONS IN CANADA

RELIGIOUS CREEDS OF THE WORLD

(FROM LATEST AUTHORITIES)

ENGLISH SPEAKING RELIGIOUS COMMUNITIES OF THE WORLD.

CANALS. The average cost of making canals has been $48,000 in Great Britain, $50,000 in France, $49,000 in the United States, and $77,000 in Canada per mile. The great Canals of the world with length of miles and cost of construction are given below:

Name.	Where Located.	Date.	Miles.	Cost.
Suez	Egypt	1869	100	$85,000,000
Schuylkill Coal and Nav. Co	Pennsylvania	1825	108	13.207,000
Burgundy	France	1775	158	11 000,000
Amsterdam	Holland	1825	14	10,150,000
Bengal	India	1854	900	10,000,000
Chesapeake & Ohio	Maryland	....	184½	11.375,000
Delaware & Hudson	N. Y. and Penn.	....	168	9,000,000
Illinois and Michigan	Illinois	....	102	8,600,000
Erie	New York	1825	363	46,018,234
Champlain	New York		81	
Welland	Canada	1830	41	7,608,240
Caledonian	Scotland	1822	60	5,700,000
Pennsylvania	Pennsylvania	1830	359	7,731,750
James River and Kanawha	Virginia	....	147	5,000,000
Ohio and Erie	Ohio	1830	307	4,600,000
Miami	Ohio	1830	178	3,700,000
Morris and Essex	New Jersey	....	101	2,825.997
Wabash and Erie	Indiana	....	374	6,000,000
Imperial	China	1400	2000	....
Orleans	France	1775	....	....
Languedoc	France	1668	160	3,400,000
Bridgewater	England	1777	38	1,800,000
Eyder	Denmark	1785	26	2,550,000
Black River	New York	1861	50	3.224,779
Helder	Holland	1825	60	4,500,000
Oswego	New York	1862	43	3,490 949
Delaware and Raritan	New Jersey	....	43	3,935,287
Chesapeake and Delaware	Maryland	....	12 6	3,547,561
Susquehanna	Pennsylvania	....	45	4,857,105
Union	Pennsylvania	....	77½	5,907,000

The Imperial Canal, China, is the longest in the world, and the greatest in point of traffic, and connects 41 cities situated on its banks; its length is 2,100 miles. The next is the Vishney, Russia, 1,434 miles, including a part of the river Volga.

The Suez Canal opened in 1869, connects Suez on the Red Sea with Port Said on the Mediterranean. It is 72 feet wide at the bottom, about 300 feet at the surface, and 26 feet deep, easily passing the largest vessels. It was 13 years in construction. The tolls average $4,300 per vessel. Steamers go through in 40 hours, of which 17 steaming. The saving to commerce by reason of this canal, after deducting payment of fees, is above $10,000,000 annually. The British Government owns one-fifth of the shares, having bought 176,602 from the Khedive in 1876. The canal shortens the voyage between England and the East by one-third. The value of what passes through the canal is equal to one-seventh of the total foreign commerce of Great Britain. The flags of vessels passing through since its opening have been 77 per cent. British, 9 French, 4 Dutch, and 10 per cent. of other nations.

The estimated cost of the Panama Canal is $132,475,000, Its length will be 46 miles, including a tunnel of 4 miles. or 7,040 yards, which will be 100 feet wide and 160 feet high, which is estimated at something over 27½ million dollars. At present date (June 1892) its completion appears doubtful. Public interest is directed towards the Nicaragua Canal. See page 109.

The following table exhibits the prodigious increase of business on Suez Canal:

Years.	No. of Vessels	Tonnage.	Transit of Vessels.	Sundry Receipts.	Total Receipts.	Expenses of Working	Net Profits.	Proportion of Expenses to Receipts
			Dollars.	Dollars.	Dollars.	Dollars.	Dollars.	Per Cent.
1870 ...	486	436,000	1,031,800	353,600	1,385 400	1,291.600	94,000	93 21
1871	765	761,000	1.519,800	1,134,200	2,654,000	1,165,400	1,488,600	43.90
1872....	1.082	1,439,000	2,867,600	758,400	3.626,000	1,007,800	2,618,200	27 79
1873 ...	1,173	2,085,000	4,165.320	745,000	4,910,320.	1.144,000	3,766,000	23 30
1874 ...	1,264	2,424.000	4,530,800	631,400	5.162,200	1,281.800	3.880.400	24 83
1875 ..	1,494	2,941,000	5,286,200	583,800	5,870,000	1,243,200	4,625.800	21 18
1876 ...	1,457	3,072,000	5,526.400	537,200	6,063,600	1,120.000	4,943,400	18.47
1877 ...	1,663	3.419,000	6,035,800	599,400	6,635,200	1,155.200	5,480,000	17 41
1878 ...	1,593	3.291,535	6,219.646	142.532	6,362.178	1.009.270	5,352 908	15 85
1879 ...	1,477	3,236,942	5,937.212	135,003	6,072.215	973,470	5,098,745	16.03
1880	2,017	4,378,064	7,997,008	150,880	8,147,888	1,088,840	7.059,048	13 36
1881	2.727	5.794,401	10,254,870	680,465	10,935,335	1,061.940	9.873,395	9 71
1882 ..	3.198	6,811,521	....	......	12,109,175	1,100,000	11,009,175	9.08
1883 .	3,307	8,051,307	....	......	13,169.560	....	....	....
1884	3,284	8.319,967	......	....	12,475,623	......	....	....

CAPACITY OF BUILDINGS. See *Buildings.*

CAPITAL. See Diagram, *Wealth of Nations*, page 38.

CAPITOL AT WASHINGTON. See Description, *District of Columbia.*

CAPITAL, or Wealth of Nations. The following table shows the Capital of Nations, ratio per inhabitant, and ratio free from national debt, thus:—

COUNTRIES.	Million Dollars.		Increase, Million Dollars.	Ratio per Inhabitant.		Ratio free of National Debt.	
	1870.	1880		1870.	1880.	1870.	1880.
Great Britain	40,428	43,590	3,162	$1,284	$1,265	$1,158	$,1153
France	34,649	36,084	1,435	910	978	847	878
United States	30,747	38,336	7,589	798	769	735	730
Germany	36,028	29,555	3,527*	686	657	667	632
Russia	16,006	17,222	1,216	214	214	200	175
Austria	13,768	14,838	1,070†	384	379	336	326
Italy	8,514	9 049	535	321	316	253	249
Holland	5,254	5,497	243	1,474	1,377	1,362	1,275
Belgium	4,379	4,573	194	866	817	837	759
Spain	6,033	6,680	647	370	399	287	248
Portugal	1,211	1.323	82	311	316	238	219
Sweden and Norway	3,371	3,590	219	560	550	555	535
Denmark	1,654	1,703	49	924	866	890	842
Turkey, Greece, etc	3,648	3,697	49	151	151	127	92
Australia	1,683	2 384	701	924	837	827	681
Canada	2,549	3,094	545	671	720	752	681
South Africa	345	477	132	389	350	379	316
South America	4,379	4,621	242	175	180	146	190
The World	204,676	226.313	21,637	$ 545	$ 550	$ 496	$ 491

*Including $1,362,000,000 for Alsace and Lorraine. †Including $267,575,000 for Bosnia.

CAPTURES. During the American civil war—1861–65—the number of Federal troops captured was 212,608. The number of Confederates captured was 476,169. The Federals captured or destroyed for violation of the blockade or in battle 1,359 Confederate vessels. The Confederate cruisers captured or destroyed 285 Federal vessels.

During the war with Napoleon the British navy captured or destroyed 156 ships of the line, 382 frigates, 662 corvettes and 1,306 brigs, a total of 2,506. In the Franco-German war the Germans took from France 9,234 pieces of cannon, including 3,485 field guns; they also took 446,000 prisoners, of whom 384,000 were sent into Germany, including 11,860 officers. See *War.*

CARBONATE OF LIME. The number of grains per gallon of water in the following rivers is: Danube, at Vienna, 8.37; Seine, at Paris, 11.30; Rhine, at Bale, 12.79; Thames, at Battersea, 15.10.

CARBONIC ACID. The quantity exhaled in 24 hours:

Person.	Age.	Oz. Exhaled.	Person.	Age.	Oz. Exhaled.
Girl	10	9	Boy	16	16
Boy	10	10	Man	28	17
Woman	19	12			

The quantity varies according to exertion. The number of ounces exhaled each hour is as follows: Sleeping, 0.6; walking 2 miles, 2.1; walking 3 miles, 3.0; riding, 4.0; swimming, 4.4; treadmill, 5.5.

CARPETS. In the United States there are 105 manufacturing establishments, employing 20,371 hands, $21,468,587 capital, 285 sets of cards, 91 domestic and 64 foreign combing machines. The value of production at wholesale prices is $31,792,802.

CARRIER PIGEONS. In 1877 the newspaper *Nationale*, of Paris, had 10 pigeons which carried dispatches daily between Versailles and Paris in 15 to 20 minutes. In November, 1882, some pigeons in face of a strong wind made the distance of 160 miles from Canton Vaud to Paris in 6½ hours, or 25 miles per hour.

CATHOLICS. See Colored Diagram, page 27.

CATS. It has been impossible to secure any reliable statistics of the number in each country. Mulhall estimates that there are fully 7 million in Great Britain. They came into England before the conquest, for the tariff of indemnity in the 10th century valued them at two pence, being equal to two hens or two gallons of beer. Southey mentions that the first settlers in Brazil paid $1,500 for a cat, and for kittens their weight in gold dust. An offer of $2,500 for a Persian cat at the Sydenham Cat Show in 1869 was refused.

CATTLE. The number in all countries .

COUNTRIES.	THOUSANDS.			
	Cows.	Horses.	Sheep.	Pigs.
United States	35,926	11,202	49,237	47 644
Great Britain	9,905	2,905	27,896	3,190
France	11,480	2,833	23,370	5,810
Germany	15,790	3,360	25,200	7,130
Russia	24,770	16,160	48,820	10,514
Austria	13.133	3,760	21.418	7,080
Italy	3,490	658	6,980	1,570
Spain	3,090	590	22,800	4,465
Portugal	520	68	2.417	858
Holland	1,462	279	898	337
Belgium	1,242	283	536	632
Denmark	1.848	352	1,720	504
Norway and Sweden	3.254	618	4,990	508
Greece	258	97	2,292	30
Roumania	3,600	640	6,180	2,310
Canada	2,702	866	3,330	1,425
Australia	7,863	1,065	65,915	815
River Platte	18,390	6,150	76,230	364
Cape Colony	1,330	241	11.280	164
Algeria	1,204	350	8,788	300
The World	158.757	52.437	410,297	95 648

See *Agricultural Products*, also Diagram page 39.

CAVALRY. On June 30, 1866, the cavalry force of the United States consisted of ten regiments, with 411 officers and 6,942 enlisted men. Russia January 1, 1887, had 56 regiments, 61,583 men; France, 77 regiments, 69,291 men; Germany, 93 regiments, 66,947 men; Great Britain, 13,448 men; Austria, 41 regiments, 43,747 men; Italy, 22 regiments, 34,000 men; Sweden and Norway, 7,000 men; Spain, 24 regiments, 13,000 men; Belgium, 5,000 men; Holland, 4,000; Portugal, 3,000; Denmark, 2,000.

CELEBRATIONS. Recent and coming National and International Anniversaries in the United States are:

1.* CENTENNIAL OF THE PROMULGATION OF THE CONSTITUTION OF THE UNITED STATES. The one hundredth anniversary of the signing of the Constitution of the United States by the Constitutional Convention of 1787 was celebrated on September 17, in Philadelphia, by an oration, a commemorative poem, and a national military and industrial display. The President, the Cabinet, Congress, foreign representatives, and officials of State governments and civic organizations were present and took part. The executive sub-commission having charge of the celebration is composed of Amos R. Little, of Philadelphia, Chairman; A. T. Goshorn, of Ohio, and Clinton T. Paine, of Maryland, Vice-Chairmen; H. P. Carson of Philadelphia, Secretary, and George C. Thomas, of Philadelphia, Treasurer

2. CENTENNIAL OF THE RATIFICATION OF THE CONSTITUTION OF THE UNITED STATES. Senator Hoar, of Massachusetts, in the United States Senate, July 31, 1886, reported from the Committee on Library, a resolution that the Senate appoint a committee of seven members to act with a similar committee of the House of Representatives to consider the expediency of properly celebrating at Washington the approaching centennial anniversary, in 1889, of the adoption of the Constitution of the United States, and that of the 400th anniversary, in 1892, of the discovery of America by Christopher Columbus. The resolution was adopted, after debate, by a vote of 41 to 12, and the following committee was appointed: Senators Hoar, Sherman, Sewall, Hawley, Voorhees, Gorman and Eustis.

3. CENTENNIAL OF THE FOUNDATION OF THE CONSTITUTIONAL GOVERNMENT AND THE INAUGURATION OF PRESIDENT WASHINGTON. The centennial anniversary of the organization of the Constitutional Government of the United States, of the first meeting of Congress, and of the inauguration of George Washington as President, all in the city of New York, occurred April 30, 1889. The Chamber of Commerce of New York took the initiative in a movement to celebrate this anniversary in appropriate style in New York. Mr. Hewitt, of New York, introduced a joint resolution in the United States House of Representatives for the appointment of a joint committee of seven Senators and five Representatives to consider in what manner the anniversary should be celebrated. The Chamber of Commerce promptly co-operated with the Congressional Committee and appointed the proper committees. James M. Brown was chairman of the general committee, Richard A. McCurdy of the committee on the plan of celebration, Orlando B. Potter of that on Congressional legislation, W. H. Robertson on that of State legislation, and Franklin Edson on that to confer with State and municipal authorities.

4. QUADRI-CENTENNIAL OF THE DISCOVERY OF AMERICA. The resolution adopted by the United States Senate, cited above, contemplated the celebration, in 1892, of the 400th anniversary of the discovery of America by Columbus. It was determined that the occasion should be marked by a World's Exposition and that the President of the United States should invite the Governments of North, Central and South America, and of Spain and Italy to participate. Chicago was chosen as the place by congress Feb. 24th 1890. A national commission (one from each State of the Union) was created. Local boards were named, and full plans have been matured. Hon. Thomas W. Palmer, of Michigan, is President of the Exposition, and Col. George R. Davis, Director General.

CENTER OF POPULATION. The following table shows the position of the center of population in the United States at the close of each decade from 1790–1880:

Date.	Position of Center of Population.							Westward Movement during Preceding Decade.
	N. Lat.			W. Long.			Approximate location by Important Towns.	
	°	′	″	°	′	″		Miles.
1790	39	16	20	76	11	12	23 miles east of Baltimore, Md	....
1800	39	16	06	76	56	30	18 miles west of Baltimore, Md	41
1810	39	11	30	77	37	12	40 miles n. w. by west of Washington, D. C.	36
1820	39	05	42	78	33	00	16 miles north of Woodstock, Va.	50
1830	38	57	54	79	16	54	19 miles w. s. w. of Moorefield, West Va.	39
1840	39	02	00	80	18	00	16 miles south of Clarksburg, West Va.	55
1850	38	59	00	81	19	00	23 miles s.e. of Parkersburg, W. Va.	55
1860	39	00	24	82	48	48	20 miles south of Chillicothe, Ohio	81
1870	39	12	00	83	35	42	48 miles e. by n. of Cincinnati, O.	42
1880	39	04	08	84	39	40	8 miles w. by s. of Cincinnati, Ohio, and	58
1890	39	11	56	85	32	53	A little southwest of Greensburg, Indiana	48
							Total	499

The center of population for 1880 was 8 miles west by south from the heart of the city of Cincinnati. This placed it in Kentucky, one mile from the south bank of the Ohio river, and one and a half miles southeast of the village of Taylorville Kentucky. The Census of 1890, moves it still further west. Now (1890) at Greensburg, 20 miles east of Columbus, Indiana. A noteworthy feature of the movement of the center of population westward since 1790 is the closeness with which it has clung to the parallel of 39° North Latitude.

CEREAL PRODUCTIONS. See Colored Diagram, page 42.

CHARCOAL. To make a ton will be required of wood as follows: oak, 4.4; chestnut, 4.5; beech, 5.1; birch, 5.9; elm, 5.2; pine, 6.0.

For heating power 12 lbs. charcoal are equal to 10 lbs. coal or 13 lbs. of coke. It is much used in France, Italy and America. The ironworks of the United States consume 600,000 tons charcoal yearly; the yield of 50,000 acres, the average yield being 12 tons per acre. At Noirmoutiers, in France, 200 furnaces are constantly at work making charcoal from seaweed. In Ireland it is often made from peat.

CHECKS. The use of checks as compared with coin, etc., is shown under head of *Bills of Exchange*.

CHEESE. The component parts of cheese are shown in the following table:

	Chester.	Parma.	Brie.	Dutch.	Gruyere.
Water	30.4	30.3	34.0	41.4	32.1
Nitrogen	8.0	7.9	5.1	7.0	8.0
Fat	36.6	31.1	53.3	42.8	41.8
Various	25.0	30.7	7.6	8.8	18.1
	100.0	100.0	100.0	100.0	100.0

See *Butter* It takes a gallon of milk to produce a pound of cheese. In 1880 there were 3,962 cheese and butter establishments in the United States, employing 8,000 hands, nearly 10 million dollars capital, and producing 171,750,495 lbs. of cheese, and 16,471,163 lbs. of butter.

CHEMICAL SUBSTANCES. See *Common Names.*

CHILD-BIRTH. The average of deaths in childbirth for 20 years in England and Wales has been 32 per 10,000 births—1½ per cent. of all mothers die sooner or later in childbirth, since each mother has on an average five children.

CHINCHONA, or Quinine. The annual production in thousand pounds is: Peru, 8,900; India, 2,200; Java, 110; Jamaica, 21.

Indian bark yields from 4 to 5 per cent. of sulphate of quinine, but the superior quality of Java gives from 6 to 15 per cent. The India and Ceylon plantations are valued at 25 million dollars.

CHINESE IMMIGRATION. See *Immigration.*

CHINESE WALL. The Chinese wall is said to have been erected about 300 B. C. It was 1,728 miles long and fifteen feet thick at the top, and was built on the northern frontier of China as a defence against Tartar invasions. In some places it was a simple rampart, and in others a solid wall of granite; in some places it was from fifteen to thirty feet high. There were brick towers at intervals upon it, forty feet high.

CHOLERA. In 1866 the cholera was greatest in Italy, and worse than any previous visitation, 56 per cent. of all men and 54 per cent. of all women attacked falling victims to it. The deaths per 10,000 inhabitants in the following cities was: London, 18; Dublin, 41; Vienna, 51; Marseilles, 64; Paris, 66; Berlin, 83; Naples, 89; St. Petersburg, 98; Madrid, 102; Brussels, 184; Palermo, 197; Constantinople, 738. In 1832 the death rate averaged 38 to 40 per cent. of cases, but in subsequent visitation it was lower. The following table gives the deaths at each visitation (thousands omitted)

	1832	1848.	1854.	1866	1873	Total.
Great Britain	53	55	22	18	....	148
France	103	134	146	44	63	490
Germany	60	127	119	33	52	391
Austria	99	145	218	220	436	1,118
Other Countries	250	300	400	245	70	1,265
	565	761	905	560	621	3,412

See Plagues.

CHRISTIANITY. See Colored Diagram, page 27.

CHURCHES. See Colored Diagram, page 27.

CITIES. See Colored Diagram, *The Cities of the World*, page 46.

CLEARING HOUSE. The annual business as given by Mulhall in 1881, at the great financial centers of the world in million dollars was: New York, 38,615; London, 31,915; Paris, 11,000: Berlin, 4,945; Vienna, 2,315. The total in the United States, $64,365.

LONDON BANKER'S CLEARING HOUSE STATISTICS.

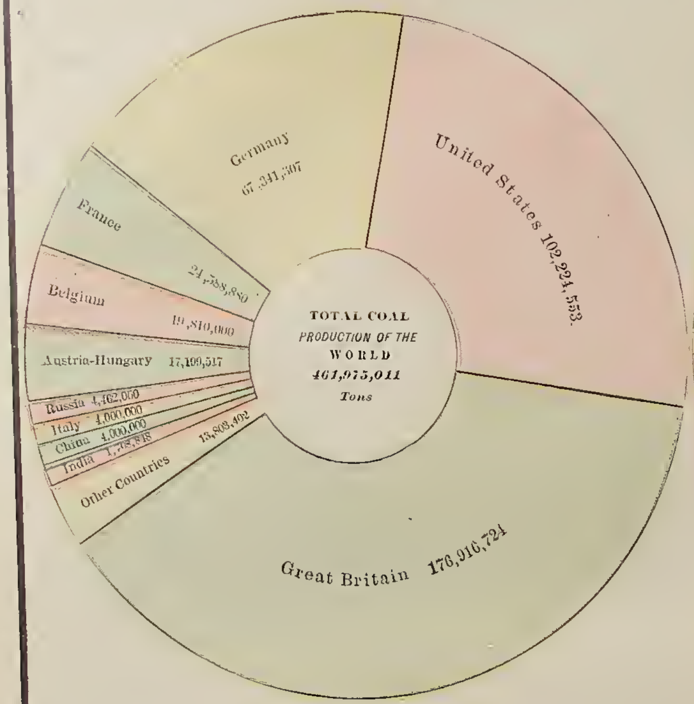
Year Ending April 30.	Total Clearances for the Year.	Year Ending April 30.	Total Clearances for the Year.	Year Ending April 30.	Total Clearances for the Year.
1868	£3,257,411,000	1875	£6,013,299,000	1882	£6,221,·00,000
1869	3,534,039,000	1876	5,407,243,000	1883	5,929,000,000
1870	3,720,623,000	1871	4,873,899,000	1884	5,798,555,000
1871	4,018,464,000	1878	5,066,533,000	1885	5,511,611,000
1872	5,359,722,000	1879	4,885,937,000	1886*	5,901,925,000
1873	6,003,335,000	1880	5,794,238,000	1887*	6,077,097,000
1874	5,993,586,000	1881	6,357,404,000	1888*	6,942,172,000

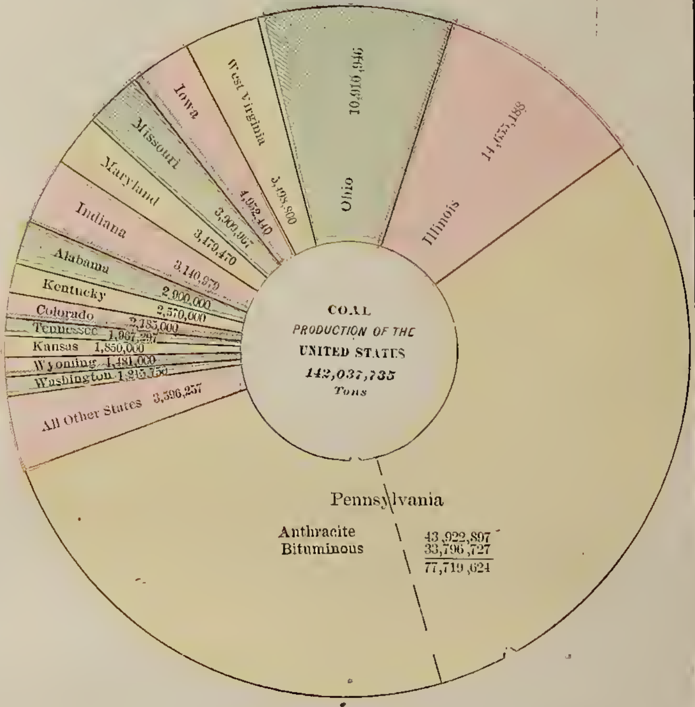
*List three for years ending December 31.

CLIMATE. This table has been carefully prepared from a recent work on American temperature. The mean annual temperature of the atmosphere at a given point in each of the forty-nine States and Territories of the Union. The place is selected as either the capital or some leading city or town where observations have been most continuously kept:—

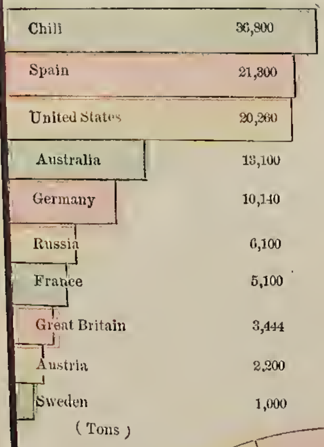
State or Territory.	Place of Observation.	Mean Annual Temperature.	State or Territory	Place of Observation.	Mean Annual Temperature
Alabama	Mobile	66°	Mississippi	Jackson	64°
Alaska	Sitka	46°	Missouri	St Louis	55°
Arizona	Tuscon	69°	Montana	Helena	43°
Arkansas	Little Rock	63°	Nebraska	Omaha	49°
California	San Francisco	55°	Nevada	C'p Winfield Scott	50°
Colorado	Denver	48°	New Hampshire	Concord	46°
Connecticut	Hartford	50°	New Jersey	Trenton	53°
Dakota	Fort Rondall	47°	New Mexico	Santa Fe	51°
Delaware	Wilmington	53°	New York	Albany	48°
Dis. of Columbia	Washington	55°	North Carolina	Raleigh	59°
Florida	Jacksonville	69°	Ohio	Columbus	53°
Georgia	Atlanta	58°	Oregon	Portland	53°
Idaho	Fort Boise	52°	Pennsylvania	Harrisburg	51°
Illinois	Springfield	50°	Rhode Island	Providence	48°
Indiana	Indianapolis	51°	South Carolina	Columbia	62°
Indian Territory	Fort Gibson	60°	Tennessee	Nashville	58°
Iowa	Des Moines	49°	Texas	Austin	67°
Kansas	Leavenworth	51°	Utah	Salt Lake City	52°
Kentucky	Louisville	56°	Vermont	Montpelier	43°
Louisiana	New Orleans	69°	Virginia	Richmond	57°
Maine	Augusta	45°	Washington Ter.	Steilacoom	51°
Maryland	Baltimore	54°	West Virginia	Romney	52°
Massachusetts	Boston	48°	Wisconsin	Madison	45°
Michigan	Detroit	47°	Wyoming	Fort Bridger	41°
Minnesota	St. Paul	42°			

MINERAL PRODUCTIONS OF THE WORLD

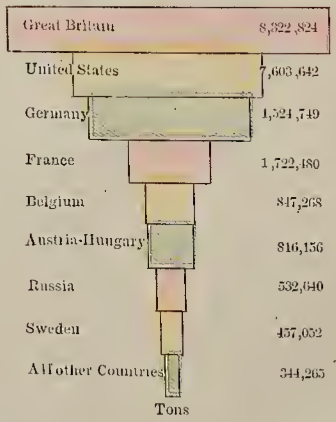




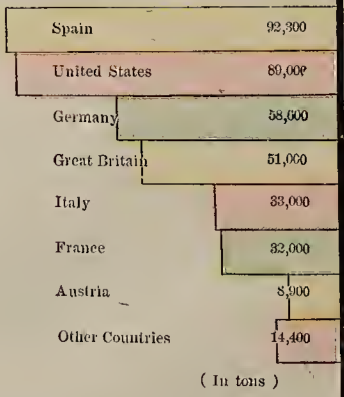
COPPER PRODUCTION

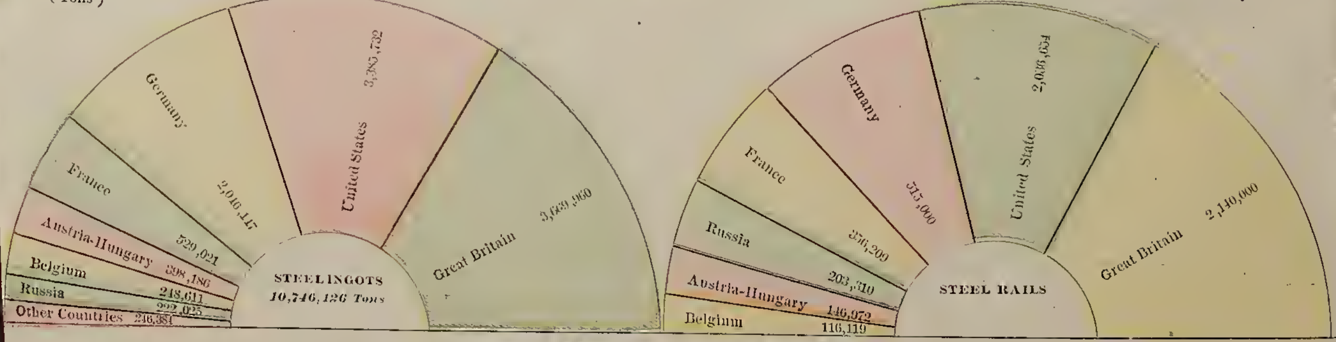


IRON PRODUCTION



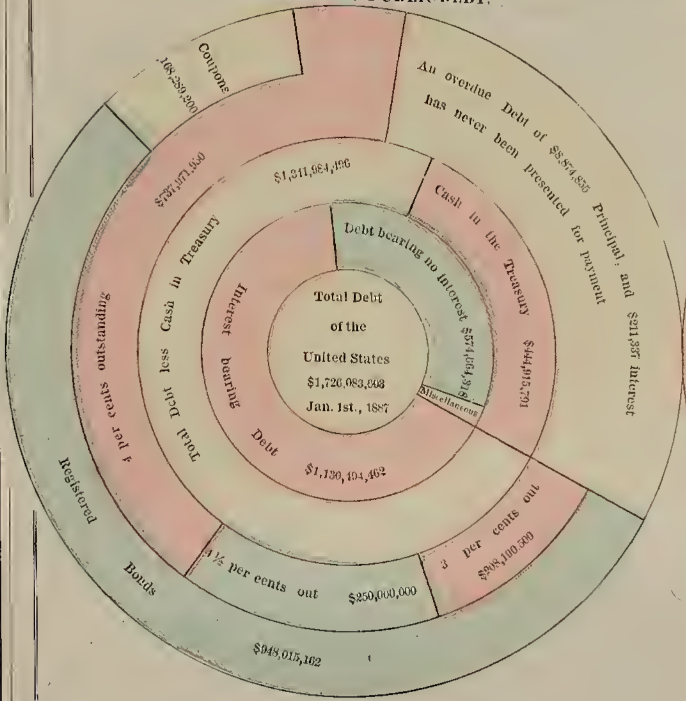
LEAD PRODUCTION



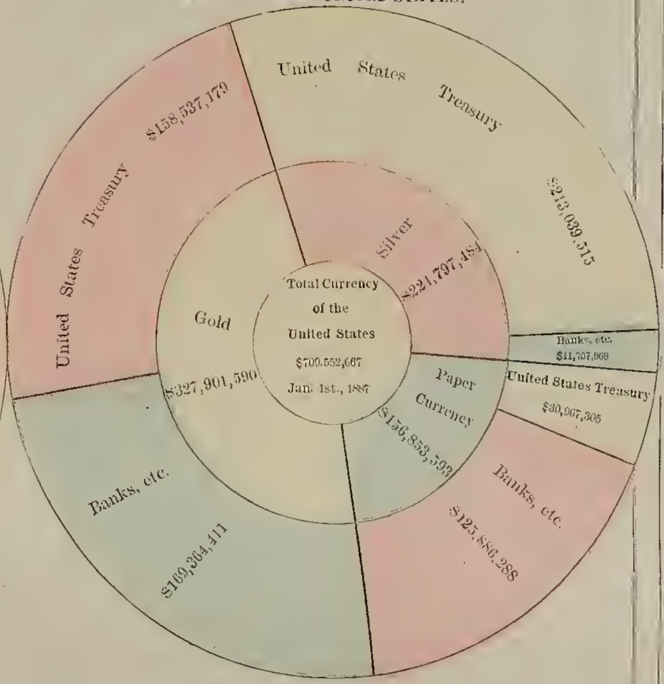


STEEL PRODUCTION OF THE WORLD

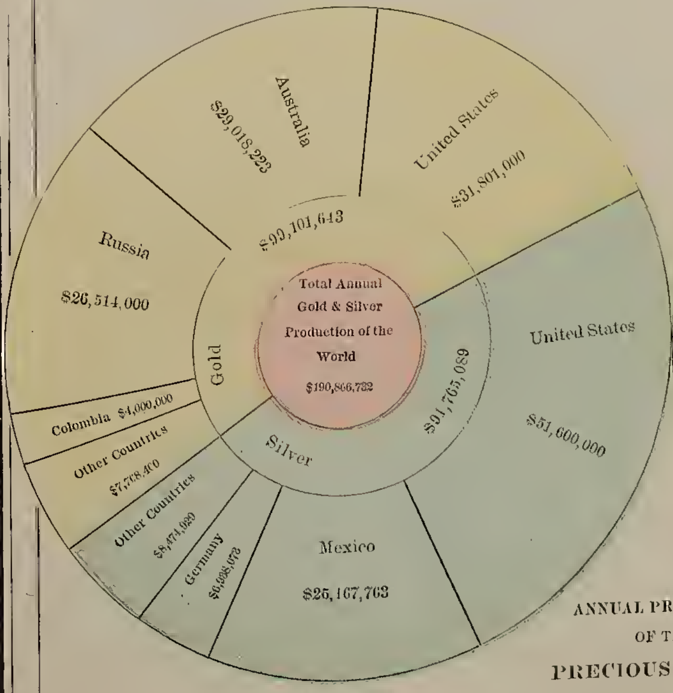
ANALYSIS OF THE UNITED STATES PUBLIC DEBT.



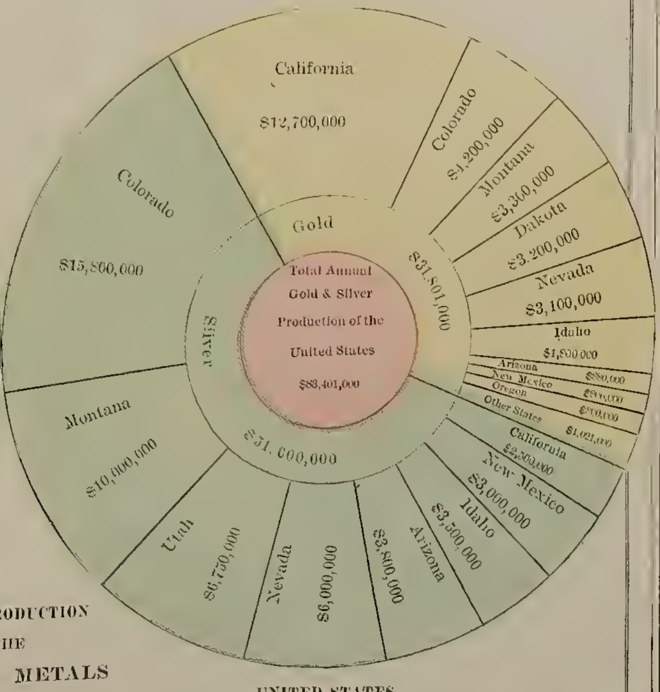
DISTRIBUTION OF THE CURRENCY OF THE UNITED STATES.



ANNUAL PRODUCTION OF THE PRECIOUS METALS



THE WORLD



UNITED STATES

CLOCKS. The most remarkable have been:—

A. D.	
760.	One presented by Pope Paul I. to Pepin.
810.	That sent to Charlemagne by Haroun-al-Raschid.
1292.	That put up in Canterbury Cathedral.
1370.	The famous clock of Strasburg.
1580.	Musical clocks made in Germany.
1639.	Galileo's, for astronomical uses.
1762.	Harrison's chronometer, London.

COAL. The following table gives the Coal output of the several States of the United States from 1885 to 1888, tons of 2,240 lbs.

	1885.	1886.	1887.	1888.
Pennsylvania	23,214,285	26,160,735	30,866,602	33,796,727
Illinois	8,742,745	9,246,435	10,278,890	14,655,188
Ohio	6,978,732	8,435,211	10,301,708	10,910,946
Maryland	2,865,974	2,517,577	3,278,023	3,479,470
Missouri	2,750,000	1,800,000	3,209,916	3,909,967
West Virginia	3,008,091	4,005,796	4,836,820	5,498,800
Indiana	2,120,535	3,000,000	3,217,711	3,140,979
Iowa	3,583,737	4,312,921	4,473,828	4,952,440
Kentucky	1,700,000	1,550,000	1,933,185	2,570,000
Tennessee	892,857	1,714,290	1,900,000	1,967,297
Virginia	557,000	684,951	825,263	1,073,000
Kansas	1,082,230	1,400,000	1,596,879	1,850,000
Oregon	44,643	45,000	31,696	75,000
Michigan	45,178	60,434	71,461	81,407
Texas	133,928	100,000	75,000	90,000
California	63,942	100,000	50,000	95,000
Arkansas	133,928	125,000	150,000	276,871
Indian Territory	446,429	534,580	685,911	761,986
Montana	77,179	49,846	10,202	41,467
Dakota	23,214	25,955	21,740	31,000
Alabama	2,225,000	1,800,000	1,950,000	2,900,000
Nebraska	....	....	1,500	1,500
Wyoming	720,828	829,355	1,170,318	1,481,560
Washington	339,510	428,525	772,612	1,215,750
Utah	190,286	200,000	180,021	258,961
Colorado	1,210,769	1,368,338	1,791,735	2,185,477
New Mexico	271,442	271,285	508,034	626,665
Georgia	133,929	223,000	313,715	180,000
Idaho	893	1,500	500	400
Total Tons	63,567,284	70,985,734	84,503,000	98,110,838

The output as represented in this table is bituminous. Pennsylvania also had of anthracite in 1885, 32,265,421 tons; in 1886, 36,696,475 tons; in 1887, 39,506,255 tons; in 1888, 43,922,897 tons. Rhode Island had of anthracite in 1887, 6,000 tons, and in 1888, 4,000 tons. [From Statistical Abstract of the United States, Twelfth Number.]

See Colored Diagram, page 30.

COAST TRAFFIC. In Great Britain in 1880 the port entries for coast traffic amounted to 36 million tons, being an average of 32 voyages per annum for 12,580 vessels. In France the coast traffic is done by 60,830 vessels, aggregating 3,515,000 tons. In Italy the coast traffic is double the amount of entries on the high seas, and is rapidly increasing, the tonnage is about 10 million tons. In 1889 the United States showed the following tonnage of American vessels engaged in coasting trade, 3,211,416 an increase of 566,549 since 1860.

COD. The average take is 122 million fish, 202,000 tons, valued at $10,550,000. The production of cod-liver oil averages 900,000 gallons yearly, chiefly in Norway and Canada, 100 livers yielding one gallon of oil.

COFFEE. Mulhall states that the coffee fields of Brazil cover 2 million acres, with 800 million trees and employing 800,000 hands. The production of 1880 in thousand tons was: Brazil, 333; Java, 90; Ceylon, 53; West Indies, 42; Africa, 36; Manilla, 35; total, 589 thousand tons, or 56 per cent. from Brazil.

The consumption of coffee, in thousand tons, for same period, was: United States, 165; Germany, 110; Brazil, 62; France, 55; Netherlands, 50; Austria, 40; British Colonies, 38; Russia, 20; Scandinavia, 20; Great Britain, 15; Italy, 14.

COIN. The Director of the Mint estimated the Gold and Silver Currency in the United States on June 30, 1879, the year of the resumption of specie payments, as follows: Gold, $286,490,698; Silver, $112,050,985. Total, $398,541,683.

On June 30, 1885, the present Director of the Mint estimated that the Coin Circulation of the United States aggregated: Gold, $542,174,636; Silver, $278,824,201. Total, $820,998,837.

THE COINAGE OF THE U. S. MINTS DURING THE FISCAL YEAR ENDING JUNE 30, 1890 WAS:—

	Dollars.
Gold Coinage	22,021,748,50
Silver Coinage—Silver Dollars	35,923,846.00
Halves, Quarters and Dimes	892,020.70
Minor Coinage—Five, Three and One-cent pieces	1,416 851,78
Total coinage	60,254,436,98

The following shows the space required for the storage of United States gold and silver coins:—

Description.	Amount.	How Put Up.	Space Required.
Gold Coin	$1,000,000	$5,000 in 8 oz. duck bags	Nearly 17 cubic feet.
Silver Dollars	$1,000,000	$1,000 in 8 oz. duck bags	250 cubic feet.
Subsidiary	$1,000,000	$1.000 in 8 oz. duck bags	150 " "

The space occupied by a bag of standard silver dollars, piled snugly in mass, is 12 inches long, 9 wide and 4 deep. Small silver (subsidiary) packs better than dollars. The weight of a thousand dollars in subsidiary silver being 56 ounces less than that of an equal value in standard silver dollars, the spaces occupied by each vary but little from each other.

Table showing the legal weight and fineness of the Coins of the United States and their diameter and thickness. (From Report of the Director of the Mint.)

	Legal Weight, Grains.	Fineness, 1,000 ths.	Diameter, 20 ths. of an Inch.	Thickness, 1,000 ths of an Inch.
GOLD.				
Double Eagle	616	900	27	77
Eagle	258	900	21	60
Half Eagle	129	900	17	46
Three Dollars	64.5	900	16	34
Quarter-eagle	77.4	900	15	34
Dollar (new)	25 8	900	11	18
SILVER.				
Trade Dollar	420	900	30	82
Standard Dollar	412.5	900	30	80
Half-dollar	192 9	900	24	57
Quarter-dollar	96.65	900	19	45
Twenty Cents	77.16	900	17½	47
Dime	38.58	900	14	32

	Legal Weight, Grains.	Fineness. (1,000 ths.)	Diameter, 20ths of an Inch.	Thickness, 1,000 of an Inch.
SILVER.				
Half-dimes	19.2	900	12	23
Three Cents	11.52	900	11	18
MINOR.				
Five Cents	77.16	75 pr. ct. copper. 25 pr. ct. nickel.	16	62
Three Cents	30	75 pr. ct. copper. 25 pr. ct. nickel.	14½	84
Two Cents	96	95 pr. ct. copper. 5 pr. ct. tin and zinc.	16	60
One Cent	48	95 pr. ct. copper. 5 per cent. tin and zinc.	15	43

The amount of British money coined is, in gold, £412,983,789; silver, £216,379,985, an average annual coinage of £950,000. The Latin Union (France, Belgium, Switzerland, Italy and Greece) coined between 1795 and 1880 as follows: Gold, $1,743,000,000; silver, $1,102,500,000. It is stated by competent authority that nearly all the coin in the European countries has been two or three times minted.

Gold coin loses one per cent. of its weight in 50 years, silver coin one per cent. in 10 years.

VALUE OF FOREIGN COINS IN UNITED STATES MONEY.

AS PROCLAIMED BY THE TREASURY DEPARTMENT.

COUNTRY.	Monetary Unit.	Standard.	Value in U. S. Money.	STANDARD COIN.
Austria	Florin	Silver	.42	
Belgium	Franc	Gold and silver	.19 3	5, 10, and 20 francs.
Bolivia	Boliviano	Silver	.85	Boliviano.
Brazil	Milreis of 1000 reis.	Gold	.54,6	5, 10, and 20 milreis
British Possessions in North America	Dollar	Gold	$1 00	
Chili	Peso	Gold and silver	91.2	Condor, doubloon, and escudo.
Colombia (United States of)	Peso	Silver	.85	Peso.
Cuba	Peso	Gold and silver	.92.6	1-16, ⅛, ¼, ½, and 1 doubloon.
Denmark	Crown	Gold	2;8	10 and 20 crowns.
Ecuador	Sucre	Silver	85	Sucre.
Egypt	Pou'd (100 piastres	Gold	91,3	5, 10, 25, 50, and 100 piastres.
France	Franc	Gold and silver	19.3	5, 10, and 20 francs.
Great Britain	Pound sterling	Gold	6 6½	½ sovereign and sovereign.
Greece	Drachma	Gold and silver	19 3	5, 10, 20, 50, and 100 drachmas.
German Empire	Mark	Gold	23 8	5, 10, and 20 marks.
Hawaiian Islands	Dollar	Gold	1 00	
Hayti	Gourde	Gold and Silver	.96 5	1, 2, 5, and 10 gourdes.
India	Rupee of 16 annas	Silver	.4[illegible]1	Mohur and rupee.
Italy	Lira	Gold and Silver	.19 3	5, 10, 20, 50 and 100 lire.
Japan	Yen	Gold & Silver	Gold 99.7 Sil. 9[illegible]	1, 2, 5, 10, and 20 yen, gold and silver yen.
Liberia	Dollar	Gold	$1.00	
Mexico	Dollar	Silver	.92 3	Peso or Dollar, 5, 10, and 20 dollars.
Netherlands	Florin	Gold and Silver	.40.2	10 florin gold, 1 and 2½ florin silver.
Norway	Crown	Gold	.26.8	10 and 20 crowns.
Peru	Sol	Silver	.85 So	
Portugal	Milreis of 1000 reis	Gold	1.08	2, 5, and 10 milreis.
Russia	Rouble of 100 copecks	Silver	.68	¼, ½, and 1 rouble.
Spain	Peseta of 100 centimes	Gold and silver	.19.3	5, 10, and 25 pesetas.
Sweden	Crown	Gold	.26 8	10 and 20 crowns.
Switzerland	Franc	Gold and silver	.19.3	5, 10, 20, and 100 francs.
Tripoli	Mahbub of 20 piasters	Silver	.76[illegible]	
Turkey	Piastre	Gold	.04 4	25, 50, 100, 250, and 500 piastres.
Venezuela	Bolivar	Gold and silver	.17	5, 10, 20, 50, and 100 bolivar.

COKE. In 1880 there were 149 establishments in the United States, employing 3,142 hands; capital, $5,545,658; consuming 4,360,110 tons of coal, producing 2,752,475 tons of coke valued at $5,359,489.

COLLEGES. The total number (1888) in the United States was 361, with 5,263 instructors and 64,024 students. The oldest of these, with their location and the year in which they were founded, are as follows. Harvard, Cambridge, Mass., 1636; William and Mary, Williamsburg, Va., 1693; Yale, New Haven, Conn., 1700; College of New Jersey, Princeton, N. J., 1746; Washington and Lee, Lexington, Va., 1749; Columbia, New York, 1754; University of Pennsylvania, Philadelphia, 1785; Brown, Providence, R. I., 1764; Rutgers, New Brunswick, N. J., 1770; Dartmouth, Hanover, N. H., 1769; Dickinson, Carlisle, Pa., 1783; Williams, Williamstown, Mass., 1793; Union, Schenectady, N.Y., 1795; Bowdoin, Brunswick, Me., 1798; Hamilton, Clinton, N. Y., 1812; Amherst, Amherst, Mass., 1821; Trinity, Hartford, Conn., 1823; University of Virginia, Charlotteville, Va., 1825; Wesleyan, Middletown, Conn., 1830; University of Michigan, Ann Arbor, Mich., 1841; University of California, Oakland, 1855; Cornell, Ithaca, N. Y., 1868; John Hopkins, Baltimore, Md., 1876.

The oldest foreign universities are: Paris, 1206; Naples, 1224; Cambridge, 1231, Salamanca, 1240; Oxford, 1280; Rome, 1303; Vienna, 1365; Leipsic, 1409; Munich, 1472; Upsal, 1470; Copenhagen, 1479; Edinburgh, 1582; Buda-Pesth, 1635; Moscow, 1755; Berlin, 1810. The University of Paris has 180 professors, 9,300 students Oxford has an endowment of $1,400,000, and Cambridge $1,375,000 per annum; the total income of the former is $2,070,000, and of the latter $1 700,000. See *Universities*, also *Schools.*

COLLEGIATE DEGREES. See *Schools.*

COLLEGE CHEERS.

Harvard—"'Rah, 'rah, 'rah! 'rah, 'rah, 'rah! 'rah, 'rah, 'rah! Harvard!"

Yale—"'Rah, 'rah, rah! 'rah, 'rah, 'rah! 'rah, 'rah, 'rah! Yale!"

Princeton—"Hurray! hurray! hurray! Tiger—sis-s-s! boom! ah!"

Cornell—"Cornell! Cornell! Cornell! I yell, yell, yell, Cornell!"

Columbia—"Hurray! hurray! hurray! C-o-l-u-m-b-i-a!"

Wesleyan—"'Rah, 'rah, 'rah! Wesleyan!"

University of Pennsylvania—"Hoorah! Hoorah! Hoorah! Penn-syl-van-i-a!"

Rutgers—"Hurrah! Hurrah! Hurrah! Bow-wow-wow!"

Stevens Institute—"Boom 'rah! boom 'rah! boom 'rah! Stevens!"

Williams—"'Rah! 'rah, rah! Willyums! yams! yums! Willyums!"

Dartmouth—"Wah, who, wah! wah, who, wah!—da, didi, Dartmouth! Wah, who, wah!"

COLOUR BLIND. In the schools of the United States 4 per cent. of the male children are found colour blind and less than 1 per cent. of female. It is stated that similar results have been shown in Europe.

COMMANDERS of the Army. See *Army*, Generals of the.

COMETS.

Name.	Years of Revolution.	Millions of Miles From Sun. Greatest Distance.	Millions of Miles From Sun. Least Distance.	Next Return.	Name.	Years of Revolution.	Millions of Miles From Sun. Greatest Distance	Millions of Miles From Sun. Least Distance	Next Return.
Halley	77	3 200	56	1910	Brorsen	6	537	61	1890
Mechain	14	....	....	..	Winnecke	6	....	....	....
Faye	8	603	192	1888	De Vico	6	475	110	1889
D'Arrest	7	....	....	1890	Encke	3	387	32	1887
Biela	7	585	82	....					

In some comets the head is without any nucleus whatever, and others have the luminous head without any tail appended to it. The tail is often of great length, that of the comet of 1858, called Donati's comet, being about fifty million miles in length, while that of the comet of 1843, one of the most brilliant ever observed, was quite three times as long. Comets were supposed by the ancients to be within the reach of the earth's atmosphere. Tycho Brahe proved, however, that they were beyond the earth's orbit, and Newton showed that they traveled in elliptical orbits of great eccentricity. Considering this to be the case, and assuming the path of the comet of 1682 to be parabolic in form, the astronomer Halley calculated its orbit from Newton's observations, and predicted its reappearance about the end of 1758 or the early part of 1759, making allowance for the disturbing action of the planet Jupiter. Halley's prediction was verified. When it reappeared it was first observed on Christmas day, 1758, by a German astronomer, and it passed nearest to the sun in March, 1759. It had been noticed in 1378, 1456, 1531, 1607, 1682, 1759, 1835, and will reappear in 1910. The orbit of Halley's comet is 3,420 million miles long and 850 millions broad. See *Astronomical Chart.*

COMMERCE. See Diagram, page 23.

COMMERCIAL COLLEGES. See *Schools.*

COMMON NAMES of Chemical Substances.

Common Names.	Chemical Names.	Common Names.	Chemical Names.
Aqua Fortis	Nitric Acid.	Laughing Gas	Protoxide of Nitrogen.
Aqua Regia	Nitro Muriatic Acid.	Lime.	Oxide of Calcium.
Blue Vitriol	Sulphate of Copper.	Lunar Caustic	Nitrate of Silver.
Cream of Tartar	Bitartrate Potassium.	Mosaic Gold	Bi-Sulphide of Tin.
Calomel	Chloride of Mercury.	Muriate of Lime	Chloride of Calcium.
Chalk	Carbonate Calcium.	Nitre of Saltpetre	Nitrate of Potash.
Salt of Tartar	Carbonate of Potassa.	Oil of Vitriol	Sulphuric Acid.
Caustic Potassa	Hydrate Potassium.	Potash	Oxide of Potassium.
Chloroform	Chloride of Gormyle.	Realgar	Sulphide of Arsenic.
Common Salt	Chloride of Sodium.	Red Lead	Oxide of Lead.
Copperas, or Green Vitriol	Sulphate of Iron.	Rust of Iron	Oxide of Iron.
Corrosive Sublimate	Bi-Chloride of Mercury.	Salmoniac	Muriate of Ammonia.
Diamond	Pure Carbon.	Stacked Lime	Hydrate Calcium.
Dry Alum	Sulphate Aluminum and Potassium.	Soda	Oxide of Sodium.
Epsom Salts	Sulphate of Magnesia.	Spirits of Hartshorn	Ammonia.
Ethiops Mineral	Black Sulphide of Mercury.	Spirit of Salt	Hydro-Chloric or Muriatic Acid.
Fire Damp	Light Carburetted Hydrogen.	Stucco, or Plaster of Paris	Sulphate of Lime.
Galena	Sulphide of Lead.	Sugar of Lead	Acetate of Lead.
Glauber's Salt	Sulphate of Sodium.	Verdigris	Basic Acetate of Copper
Glucose	Grape Sugar.	Vermillion	Sulphide of Mercury.
Goulard Water	Basic Acetate of Lead.	Vinegar	Acetic Acid (Diluted)
Iron Pyrites	Bi-Sulphide Iron.	Volatile Alkali	Ammonia.
Jeweler's Putty	Oxide of Tin.	Water	Oxide of Hydrogen.
King's Yellow	Sulphide of Arsenic.	White Precipitate	Ammoniated Mercury.
		White Vitriol	Sulphate of Zinc.

COMMONS. House of See *Parliament.*

COMMERCIAL PANICS. The most remarkable since the middle of the 18th century have been as follows:—

1763. Amsterdam, originating with the house of De Neufville, 77 heavy failures.
1773. Failure in Holland exceeding fifty million dollars.
1799. Hamburg, 82 failures, 10 million dollars; Panic at Liverpool, Parliament lent two and a half million dollars in exchequer bills on goods.
1814. England, 240 banks suspended.
1825. Manchester, failures, 10 millions.
1831. Calcutta, failures, 75 millions.
1837. United States, "Wild-cat" crisis; all banks closed.
1839. Bank of England saved by Bank of France. Severe also in France, where 93 companies failed for 30 millions.
1844. England. State loans to merchants. Bank of England reformed.
1847. England, failures, 100 millions; discount 13 per cent.
1857. United States, 7,200 houses failed for 555 millions.
1866. London, Overend-Gurney crisis; failures exceeded 500 millions.
1869. Black Friday in New York (Wall street), September 24.
1873. Jay Cooke, Bankers, involving great commercial distress throughout the United States, and carrying down many financial institutions and large business houses.
1883. Boston, shoe and leather trade, over 10 million.
1884. New York, Grant and Ward failure, involving a loss of over 25 million.
1890. London, Failure of Baring Brothers, liabilities 35 millions.

CONFEDERATE MONEY. *See Paper Money.*

CONGRESS. The lower house of Congress is composed of 332 Members and 4 Delegates from Territories, of whom 236 are Democrats, 87 Republicans, Farmers, Alliance 8, and 0 vacancy. Of the 4 Delegates 3 are Democrats and 1 Republican. The Senate is composed of 88 members, 45 Republicans, 40 Democrats. March 1891 to March 1893.

The Representation in the House of Representatives at stated periods:

From 1789 to 1792 according to Constitution	30,000
" 1792 to 1803 based on 1st census, 1790	33,000
" 1803 to 1813 " 2d " 1800	33,000
" 1813 to 1823 " 3d " 1810	35,000
" 1823 to 1833 " 4th " 1820	40,000
" 1833 to 1843 " 5th " 1830	47,700
" 1843 to 1853 " 6th " 1840	70,680
" 1853 to 1863 " 7th " 1850	93,423
" 1863 to 1873 " 8th " 1860	127,381
" 1873 to 1883 " 9th " 1870	131,425
" 1883 to 1893 " 10th " 1880	151,912
" 1893 to 1903 " 11th " 1890	173,901

CONGRESSIONAL APPORTIONMENT. The number of Representatives in the popular branch of the Congress of the United States to which each State is entitled from March 4, 1893, to March 4, 1903, based on the eleventh census, is as follows:

Alabama	9	Kansas	8	Nevada	1	Tennessee	10
Arkansas	6	Kentucky	11	New Hampshire	2	Texas	13
California	7	Louisiana	6	New Jersey	8	Vermont	2
Colorado	2	Maine	4	New York	34	Virginia	10
Connecticut	4	Maryland	6	North Carolina	9	Washington	2
Delaware	1	Massachusetts	13	North Dakota	1	West Virginia	4
Florida	2	Michigan	12	Ohio	21	Wisconsin	10
Georgia	11	Minnesota	7	Oregon	2	Wyoming	1
Idaho	1	Mississippi	7	Pennsylvania	30		
Illinois	22	Missouri	15	Rhode Island	2	Total	356
Indiana	13	Montana	1	South Carolina	7		
Iowa	11	Nebraska	6	South Dakota	2		

CONSUMPTION. In England and Wales 14 per cent. of males and 13½ per cent. of females die of consumption. The United States Census of 1880 gives the deaths from consumption as 91,551, being 1.82 per 1,000 of population and 120.95 per 1,000 of total deaths. See *Deaths.*

CONSULAR AND DIPLOMATIC SERVICE. The Envoys Extraordinary and Ministers Plenipotentiary of the United States to the leading countries with salaries attached to office were January 1, 1891.

Country.	Name and State.	Salary.	Country.	Name and State.	Salary.
Austria-Hungary	Frederick D. Grant, N. Y.	$12,000	Hawaii	John L. Stevens, Maine	$7,500
Belgium	Edwin H. Terrell, Texas	7,500	Italy	Albert G. Porter, Indiana	12,000
Brazil	Edwin H. Conger, Iowa	12,000	Japan	...	12,000
Central America	Romualdo Pacheco, Cal.	10,000	Mexico	Thomas Ryan, Kansas	17,000
Chili	Patrick Egan, Nebraska	10,000	Netherlands	Samuel R. Thayer, Minn.	7,500
China	Charles Denby, Indiana	12,000	Peru	John Hicks, Wisconsin	10,000
Columbia	John T. Abbott, N. H.	7,500	Russia	Chas. E. Smith, Penn.	17,500
France	Whitelaw Reid, N. Y.	17,500	Sweden-Norway	Wm. W. Thomas, Maine	7,500
Germany	W. W. Phelps, New Jersey	17,500	Spain	E. B. Grubb, New Jersey	12,000
Great Britain	Robert T. Lincoln, Illinois	17,500	Turkey	Solomon Hirsch, Oregon	10,000

Ministers Resident and Consul Generals are appointed to nearly all of the minor countries of the globe.

CONTINENTAL MONEY. See *Paper Money.*

COPPER. The production of copper is shown by the following table:—

	Fine Copper, Tons. 1850	1860.	1870.	1880
Great Britain	11,800	13,540	7,220	3,400
France	2,300	2,500	4,900	5,100
Germany	1,650	3,200	6,850	10,180
Russia	6,000	5,500	5,500	6,100
Spain	200	300	1,100	21,300
Sweden	2,300	2,200	2,000	1,600
Austria	1,600	1,900	2,000	2,200
Europe	25,850	29,140	29,570	49,880
United States	2,700	5,530	12,650	20,260
Chili	14,300	25,100	34,200	36,800
Australia	2,400	7,600	9,700	13,100
Total	45,250	67,370	85,1 0	120,040

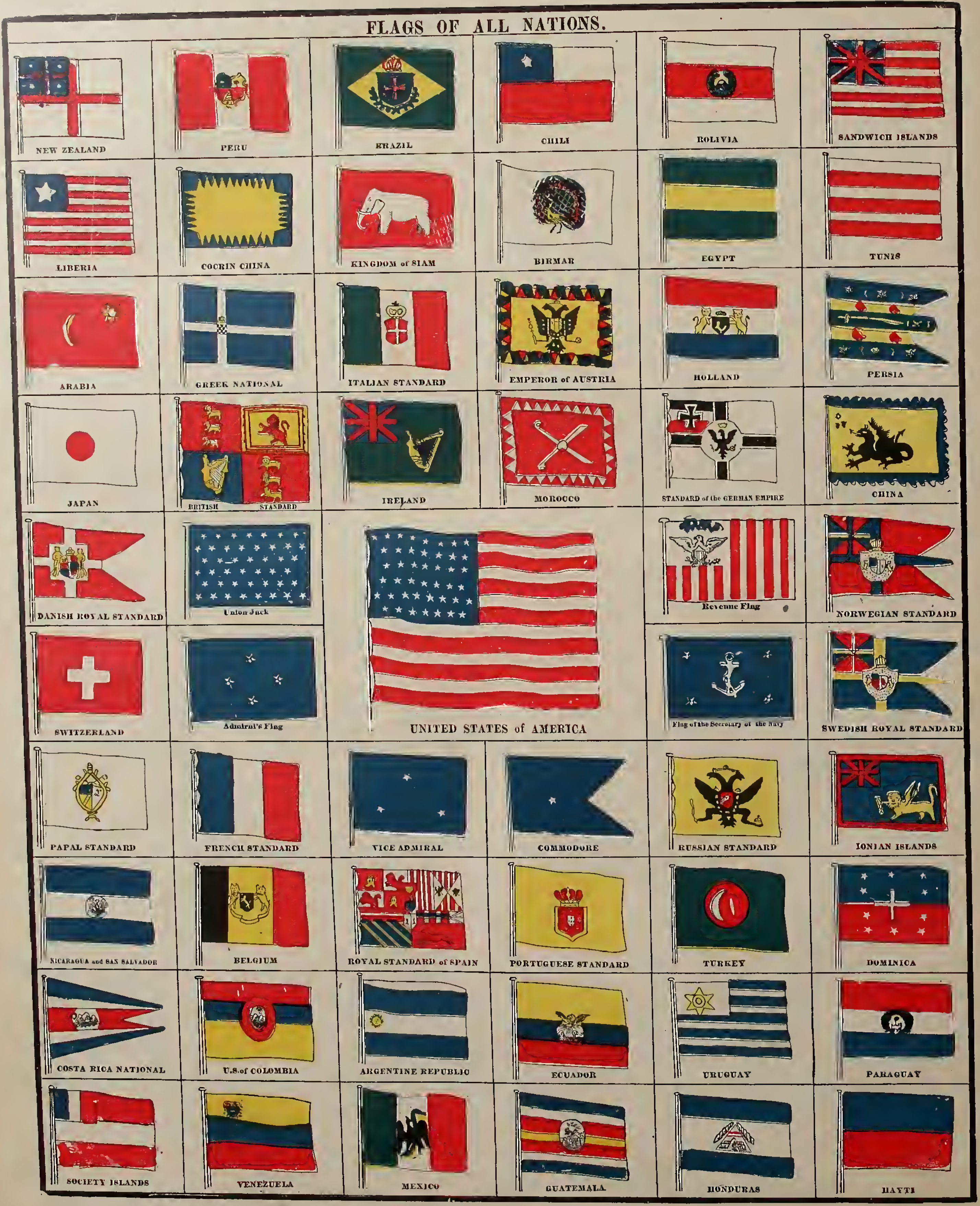
The production increases rapidly in the United States, the yield for 1881 being 34,200 tons fine copper, valued at $11,000,000. The above table does not include Japan, which produces 3,000 tons yearly, all being retained for home consumption. The ratio of copper to copper ore is as follows:—

	Per Cent. of Pure Copper.		Per Cent. of Pure Copper.
Germany	3	Austria	4
France	5	England	7
Australia	12	United States	18

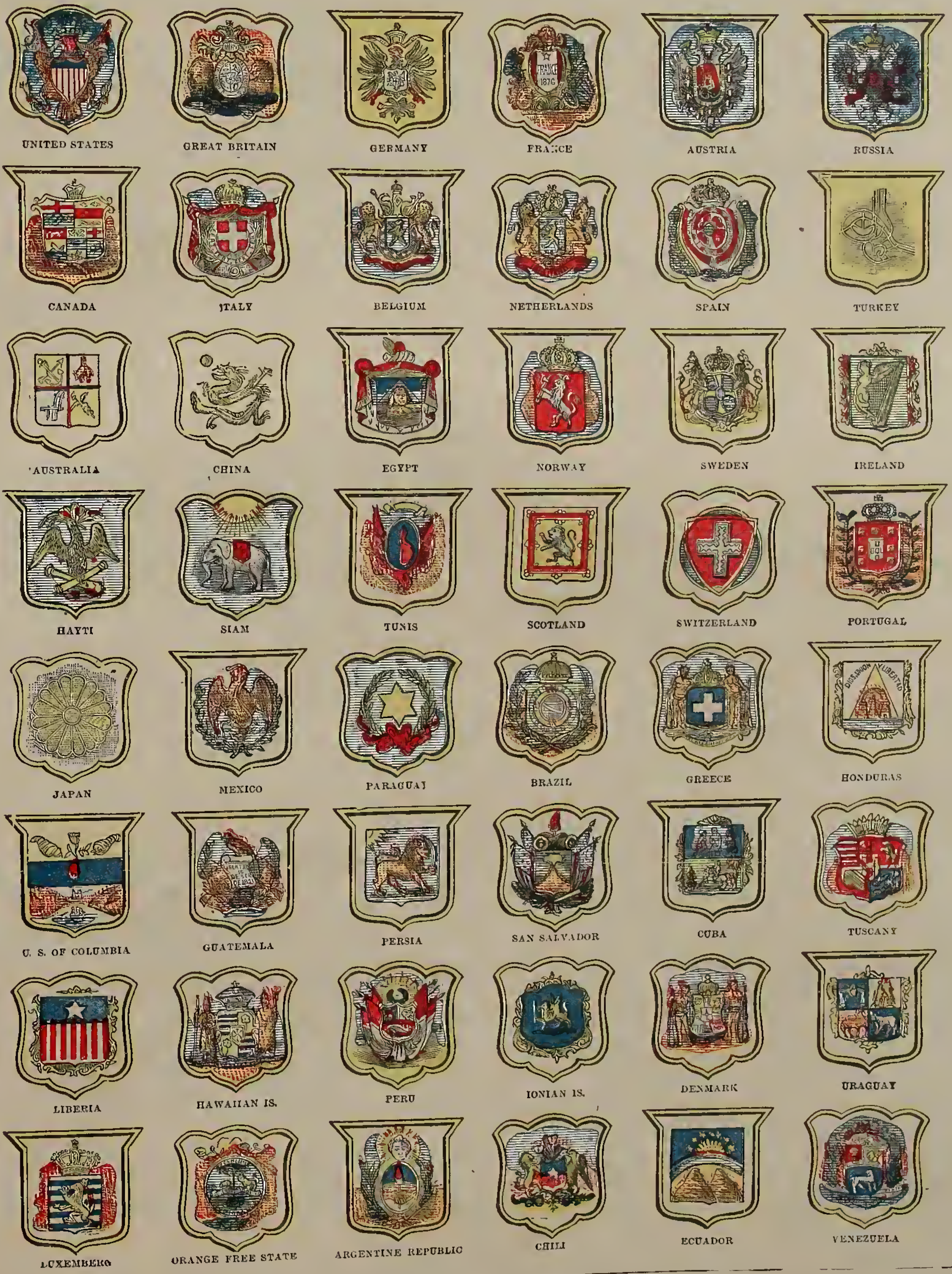
With zinc, copper forms brass, and with different proportions of tin it forms bronze, bell-metal, gun-metal and speculum-metal. Brass varies in composition according to the purpose for which it is to be used. It generally consists of two-thirds copper and one of zinc, with traces of lead and tin.

See Diagram, page 30.

FLAGS OF ALL NATIONS.


NEW ZEALAND
PERU
BRAZIL
CHILI
BOLIVIA
SANDWICH ISLANDS
LIBERIA
COCHIN CHINA
KINGDOM of SIAM
BIRMAH
EGYPT
TUNIS
ARABIA
GREEK NATIONAL
ITALIAN STANDARD
EMPEROR of AUSTRIA
HOLLAND
PERSIA
JAPAN
BRITISH STANDARD
IRELAND
MOROCCO
STANDARD of the GERMAN EMPIRE
CHINA
DANISH ROYAL STANDARD
Union Jack
Revenue Flag
NORWEGIAN STANDARD
SWITZERLAND
Admiral's Flag
UNITED STATES of AMERICA
Flag of the Secretary of the Navy
SWEDISH ROYAL STANDARD
PAPAL STANDARD
FRENCH STANDARD
VICE ADMIRAL
COMMODORE
RUSSIAN STANDARD
IONIAN ISLANDS
NICARAGUA and SAN SALVADOR
BELGIUM
ROYAL STANDARD of SPAIN
PORTUGUESE STANDARD
TURKEY
DOMINICA
COSTA RICA NATIONAL
U.S. of COLOMBIA
ARGENTINE REPUBLIC
ECUADOR
URUGUAY
PARAGUAY
SOCIETY ISLANDS
VENEZUELA
MEXICO
GUATEMALA
HONDURAS
HAYTI

ARMS OF VARIOUS NATIONS.



UNITED STATES
GREAT BRITAIN
GERMANY
FRANCE
AUSTRIA
RUSSIA
CANADA
ITALY
BELGIUM
NETHERLANDS
SPAIN
TURKEY
AUSTRALIA
CHINA
EGYPT
NORWAY
SWEDEN
IRELAND
HAYTI
SIAM
TUNIS
SCOTLAND
SWITZERLAND
PORTUGAL
JAPAN
MEXICO
PARAGUAY
BRAZIL
GREECE
HONDURAS
U. S. OF COLUMBIA
GUATEMALA
PERSIA
SAN SALVADOR
CUBA
TUSCANY
LIBERIA
HAWAIIAN IS.
PERU
IONIAN IS.
DENMARK
URAGUAY
LUXEMBERG
ORANGE FREE STATE
ARGENTINE REPUBLIC
CHILI
ECUADOR
VENEZUELA

CORAL. In almost all tropical seas, incrusting patches or small banks of living coral are to be found along the shores, wherever they consist of hard rock and the water is quite clear. In the Indian and Pacific oceans, however, far away from any land, huge masses of coral rock rise up from vast and unknown depths just to the level of low water. Groups of such masses occur over spaces sometimes of 400 or 500 miles long by 50 or 60 in width. The great barrier reef along the northeast coast of Australia is more than 1,000 miles long, and from 10 to 90 miles in width. The reef masses consist of living corals only at their upper and outer surfaces. All the interior is composed of dead coral and shells, either whole or in fragments. The coral animal is polyp, belonging to the group of radiata. The animals that build reefs are not much larger than pin heads. The surface of a reef, when exposed at low water, is composed of solid looking stone, that is often capable of being split up and lifted in slabs, bearing no small resemblance to some of the oldest limestones. The slabs, when broken open, are frequently found to have a semi-crystalline structure internally, by which the forms and the organic structure of the corals and shells are more or less disguised and obliterated. The raised coral reefs in the islands of Timor and Java are often internally as white and friable as chalk.

CORN. See Diagram, page 42.

COTTON. From the tables of the Tenth Census (1880) there were 14,441,993 acres, and 5,737,257 bales produced in the United States. The average product per acre in lbs. being 190; seed cotton, 567; lint, 189; cotton seed, 378; a total production of 1,362,599 tons of lint and 2,725,197 of cotton seed. The world's production same year was 4,039 million lbs., distributed in million lbs. as follows: United States, 3,161; India, 540; Egypt, 282; other countries, 56.

The consumption of cotton, same period in million lbs. was: Great Britain, 1,404; United States, 961; Germany, 390; France, 340; other countries, 649; total, 3,744. In 1886 the United States exported $205,086,742 worth of raw cotton, and $13,959,934 in cotton manufactures.

COTTON SEED OIL. See *Oil.*

COUNCILS. That at Jerusalem, when the first controversy was discussed, in 48; at Antioch, 269; at Arles, 314; first Nicene one, when 328 fathers attended against Arins, 325; first at Constantinople, 381; at Sardis, 400; first at Ephesus, 431; second at Constantinople, 552; one called Milevetan, 568; fourth at Constantinople, 680; second at Nice, 787; fifth at Constantinople, 869; at Vercellus, 1053; Lateran council held at Rome, in the years 1123, 1139, 1179, 1215 and 1512; at Lyons, 1255 and 1274; at Vienna, 1311; at Constance, against Wycliffe, 1415; the one against Luther, at Rome, 1546; at Bituria, in Tuscany, 1431; at Tours, 1448; Florence, 1449; Toledo, in Spain, 1437; Aspurgh, in Germany, 1548; Cologne, 1548; Treves, in Germany 1548; Cologne, 1549; Numantia, 1550; at the Vatican, 1869.

COWS. The number of cows in the principal countries as given by Mulball (in thousands) are:

United States	33,360	Switzerland	1,036
Great Britain	9,905	Roumania, Etc.	3,858
France	11,480	Canada	2,702
Germany	15,790	Australia	7 863
Russia	22,770	River Platte	18,390
Austria	13,133	Algeria	1,204
Italy	3,490	Cape Colony	1,330
Spain and Portugal	3,623		
Belgium and Holland	2,708	The World	157,195
Scandinavia	4,553		

CREMATION. A body weighing 140 lbs. produces 3 lbs. of ashes; time for burning, 55 minutes.

CRIME. The criminal statistics of New York city for 1886 gives the following, which may be taken as a fair exhibit of other cities in the United States, according to size: The police of New York city arrested 73,035 persons, of whom 54,484 were men, and 18,551 were women. The lost children numbered 3,787; all but 192 were restored to their friends, and of this number 161 were abandoned infants. There were 44,470 convictions in the courts, 728 prisoners were conveyed to Sing Sing, and 2,163 to the penitentiary. 32,213 licenses were issued, 18,689 conveyances and 16,478 mortgages recorded and 32,986 chattel mortgages filed.

The average annual number of murders in all countries is 11,455, of which 3,470 are in Italy, 2,400 are in Russia, 3,060 in the United States, 1,600 in Spain. This includes homicides and in some countries infanticide. The deliberate murders, excluding manslaughter and infanticide, are about one-third of the above, and in Spain and Italy one-sixth.

The number of murders and homicides in the United States reported in the newspapers during the year 1886 was 1,499, classified by causes as follows: Quarrels, 631; jealousy, 181; liquor, 125; by highwaymen, 89; highwaymen killed, 24; insanity, 64; infanticide, 43; resisting arrest, 52; strikes, 35; riots, 16; self-defence, 19; outrage, 10; duels, 12; unknown, 196.

The number of legal executions reported was 83, distributed among the States as follows: Alabama, 2; Arkansas, 11; California, 2, Colorado, 2; Florida, 3; Georgia, 5; Illinois, 4; Indiana, 5; Kentucky, 1; Louisiana, 10; Maryland, 1; Mississippi, 2, Missouri, 6; Nebraska, 1; New York, 4; North Carolina, 5; Ohio, 1; Oregon, 1; Pennsylvania, 1; South Carolina, 4; Tennessee, 1; Texas 5; Virginia, 2. Territories: Arizona, 1; District of Columbia, 3; Indian Territory, 1. Of this number all were males; 42 were whites, 40 negroes, and 1 Chinaman.

The number of lynchings reported was 133, distributed among the States as follows: Alabama, 6; Arkansas, 4; California, 2; Colorado, 3; Connecticut, 1; Florida, 9; Georgia, 6; Illinois, 1; Indiana, 8; Kansas, 5; Kentucky, 8; Louisiana, 6; Maryland, 1; Mississippi, 17; Missouri, 4; Nebraska, 3; New Jersey, 1; North Carolina, 2; Ohio, 2; South Carolina, 3; Tennessee, 8; Texas, 17; Virginia, 2; West Virginia, 3. Territories: Washington, 1; Indian Territory, 10. Of this number 131 were males, 2 females, 62 whites, and 71 negroes. These figures are taken from a compilation in the Chicago *Tribune.*

CRISES. See *Commercial Panics.*

CROPS. See *Agriculture*, also Diagram, page 42.

CURRENT. In the Pacific Ocean a bottle was thrown overboard in 4 deg. S. and 119 deg. W. and after 455 days was picked up June, 1881, in the Fecjee Islands, having been carried 6,700 miles or 15 miles a day.

The velocity of the Gulf Stream varies with the seasons. On entering Florida Straits its rate is from 60 to 100 miles per day; on entering the "Narrows" 70 to 120 miles; beyond this the rate gradually decreases to 24 miles per day.

CURRENCY. See *Paper Money*, also Diagram, *Distribution of the Currency*, page 31.

CUSTOMS. The customs revenue of the United States in 1890 was $229,168,584; or 49 per cent. of the total revenues of the United States, $463,963,080. The total revenue of Great Britain from custom duties in 1886 was $99,086,435, on the following articles:—

Chicory	$328,310	Spirits: Brandy	6,836,850
Cocoa, Cocoa Husks, and Chocolate	352.525	" Geneva and other sorts	3,876,290
Coffee	1,039,885	Tea	20.936.590
Fruit, dried: Currants	1,538,050	Tobacco and Snuff	46,942,220
" Figs, Plums, and Prunes	218,360	Wine	5,979,245
" Raisins	734,390	Other Articles (taken collectively)	91,985
Spirits: Rum	10,211,735		

DEAF AND DUMB. The danger of children being born deaf and dumb is six times greater when the parents are cousins. The ratio of sex is in most countries 55 per cent. males, 45 per cent. females; but in Italy the ratio is 58 to 42. The rate in the United States is much below the average in Europe, but there is an increase of ratio since 1831, coincident with the growth of numerous large towns. The total number of deaf and dumb in the United States according to the Tenth Census is 33,878, or 675 per million inhabitants. See *Schools.*

DEATHS. The following table gives the average annual rates per 1,000 of population of Deaths, Births and Marriages in principal countries of Europe:—

COUNTRIES.	Deaths.		Births.		Persons Married.	
	Average for 20 Years, 1853–1872.	Average for 10 Years. 1871–1880.	Average for 20 Years, 1853–1872.	Average for 10 Years, 1871–1880	Average for 20 Years, 1853–1872.	Average for 10 Years. 1871–1880.
England	22 4	21 4	34 8	35.4	16 9	16 2
Scotland	21 8	21 7	34.9	35 1	14 8	14 4
Ireland	....	18 3	....	26 5	....	9 4
Austria	31.9	31 2	40.2	39.9	17 3	17 1
Belgium	22 8	22 6	31.8	32.2	14 6	14 4
Denmark	20.3	19 3	31.6	31 2	15.9	15 6
France	24 4	24 3	26.1	25 6	15.9	15 1
Italy	30 2	29.7	37 4	36.9	15.4	15 2
Netherlands	25 7	24.3	34.3	36 2	15.9	16.1
Spain	29 7	29.7	37 2	37 2	15 1	15.1
Germany	27.2	27.1	37.7	39 8	17.1	17.7.
Sweden	20.4	18 4	32 0	30.3	14.1	13 6

It will be seen from the above table that the death rate is much higher in Italy, Austria, Spain and Germany, than in France or England; while the mortality of the most northern countries of Europe—Denmark and Sweden—is less by ten per cent. than in Great Britain, and fifty per cent. lower than in Italy or Austria.

Vital Statistics of Foreign and American Cities.

Collected from the reports of Boards of Health, and for the year 1883 in most cases.

City.	Death rate to every 1,000 inhabitants.	City.	Death rate to every 1,000 inhabitants.	City.	Death rate to every 1,000 inhabitants.
Alexandria	34.20	Havana	45.70	Paris	25.44
Amsterdam	26.90	Leeds	21.60	Philadelphia.	20 34
Baltimore.	22.93	Leicester	21.80	Pittsburgh	20.65
Berlin	29.04	Leipzig	24.30	Providence	19 50
Birmingham	21.01	Liverpool	26.60	Quebec	22 90
Bombay	33 70	London	20 40	Rio de Janeiro	39.40
Bordeau	26 70	Madrid	37.40	Rome	26.80
Boston	22.76	Manchester	25.50	Rotterdam	24 06
Breslau	31.35	Marseilles	31.63	St. Louis.	19 74
Brooklyn	22 04	Melbourne	19.45	St. Petersburg	51 40
Brussels.	23.90	Mexico	30 90	San Francisco	19.80
Calcutta	31 10	Milan	30 60	Sheffield	21.60
Chicago	19.92	Milwaukee	19 50	Stockholm	23.10
Christiania	18.80	Montreal.	37.20	Sunderland	20 90
Cincinnati	21 12	Munich	31.98	Turin	25 60
Cleveland.	17.46	Naples.	33.10	Valparaiso	64.60
Copenhagen	22.00	Newcastle	25 40	Venice	25 90
Dresden	25 60	New Orleans	29 42	Vera Cruz	70 50
Dublin	29 10	New York	25 81	Vienna	28 27
Edinburgh	19.20	Nottingham	22 40	Washington	23 38
Glasgow	28 25	Palermo	28 50	Zurich	25.60
Hamburgh	25.52				

Dr. Playfair states that in England 18 per cent. of children in the upper classes, 36 per cent. of those of tradespeople, and 55 per cent of workmen's children die before reaching their fifth birthday; too high an estimate.

DEATHS IN THE UNITED STATES.

STATES AND TERRITORIES.	TOTAL.			DEATHS BY RACES. (1880.)			
	Population.	Deaths in 1880.	Rate per 1,000.	White.	Colored.	Ratio per 1,000 White.	Ratio per 1,000 Colored
Alabama	1,262,505	17,929	14.20	8,329	9,600	12.57	15.99
Arizona	40,440	291	7.20	281	10	7.91	1.89
Arkansas	802,525	14,812	18.46	11,307	3,505	19.11	16.61
California	864,694	11,530	13.33	10,462	1,068	13.63	10.95
Colorado	194,327	2,547	13.11	2,521	26	13.19	8.12
Connecticut	622,700	9,179	14.74	8,928	251	14.61	21.03
Dakota	135,177	1,304	9.65	1,249	55	9.37	27.09
Delaware	146,608	2,212	15.09	1,737	475	14.45	17.95
District of Columbia	177,624	4,192	23.60	2,090	2,102	17.71	35.25
Florida	269,493	3,159	11.72	1,718	1,441	12.04	11.35
Georgia	1,542,180	21,519	13.97	10,195	11,354	12.48	15.65
Idaho	32,610	323	9.90	306	17	10.54	4.72
Illinois	3,077,871	45.017	14.63	44,185	832	14.57	17.80
Indiana	1,978,301	31,213	15.78	30,213	1,000	15.58	25.31
Iowa	1,624,615	19,377	11.93	19,218	159	11.90	15.87
Kansas	996,096	15,160	15.22	14,100	1,060	14.80	24.12
Kentucky	1,648,690	23,718	14.39	18,338	5,380	13.31	19.81
Louisiana	939,946	14,514	15.44	7,038	7,476	15.46	15.41
Maine	648,936	9,523	14.67	9,470	53	14.64	25.43
Maryland	934,943	16,919	18.10	12,362	4,557	17.05	21.67
Massachusetts	1,783,085	33,149	18.59	32,720	429	18.55	22.22
Michigan	1,636,937	19,743	12.06	19,328	415	11.97	12.81
Minnesota	780,773	9,037	11.57	8,960	77	11.53	19.79
Mississippi	1,131,597	14,583	12.89	6,022	8,561	12.56	13.12
Missouri	2,168,380	36,615	16.89	33,649	2,966	16.63	20.37
Montana	39,159	336	8.58	297	39	8.39	10.33
Nebraska	452,402	5,930	13.11	5,875	55	13.06	20.84
Nevada	62.266	728	11.69	680	48	12.69	5.51
New Hampshire	346,991	5,584	16.09	5,570	14	16.08	18.37
New Jersey	1,131,116	18,474	16.33	17.685	789	16.19	20.17
New Mexico	119,565	2,436	20.37	2,397	39	22.04	3.59
New York	5,082,871	88,332	17.38	86,699	1,633	17.28	24.42
North Carolina	1,399,750	21,547	15.39	12,167	9,380	14.02	17.61
Ohio	3,198,062	42,610	13.32	40,956	1,654	13.13	20.63
Oregon	174,768	1,864	10.67	1,792	72	10.25	6.15
Pennsylvania	4,282,891	63.881	14.92	61,767	2,114	14.71	24.61
Rhode Island	276,531	4,702	17.00	4,523	179	16.75	27.15
South Carolina	995,577	15,728	15.80	5,194	10,534	13.28	17.42
Tennessee	1,542,359	25,919	16.80	17.312	8,607	15.20	21.32
Texas	1,591,749	24,735	15.54	18,998	5,737	15.87	14.54
Utah	143,963	2.414	16.77	2,403	11	16.87	7.14
Vermont	332,286	5,024	15.12	5,008	16	15.11	14.98
Virginia	1,542,565	24,681	16.32	12,345	12,336	14.01	19.52
Washington	75,116	755	10.05	703	52	10.46	6.56
West Virginia	618,457	7,418	11.99	6,984	434	11.78	16.74
Wisconsin	1,315,497	16,011	12.17	15,927	84	12.16	14.28
Wyoming	20,789	189	9.09	183	6	9.41	4.43
The United States	50,155.783	756,893	15.09	640.191	116,702	14.74	17.28

VIOLENT DEATHS—ALL COUNTRIES.

United States (1870)	22,740
United Kingdom	23,822
France	16,373
Germany	24,592
Russia	18,500
Austria Proper	10,150
Italy	6,656
Spain	4,700
Switzerland	2,550
Belgium	2,577
Denmark	1,054
Sweden	2,740
Norway	1,290
Total	137,714

The above includes 13,400 murders, 21,200 suicides, 103,000 accidental deaths. Lowest number, in Russia; greatest European, in Switzerland.

ACCIDENTAL DEATHS PER ANNUM.

	No. per Million Inhab'ts.
England	670
France	280
Prussia	407
Saxony	298
Bavaria	236
Hanover	396
Austria	258
Switzerland	466
Italy	181
Spain	202
Belgium	330
Denmark	232
Sweden	479
Norway	681
Russia	201
United States	623
New York	668
London	665
Paris	682

DEATHS FROM DRINK.

	Per Annum.	Per 1,000 Deaths.		Per Annum.	Per 1,000 Deaths.
England	1,082	2.04	Italy	709	0.85
Scotland	230	3.29	Switzerland	244	8.81
Ireland	280	2.78	Sweden	502	6.25
France	872	1.05	Norway	72	2.36
Belgium	456	3.83	New York	324	12.08

DEBTS. See Colored Diagram, page 22.

DEPTHS. The average depths of the sea in yards is: the Atlantic, 4,026; Pacific, 4,252; Indian, 3,658; Artic, 1,690; Antartic, 3,000; Mediterranean, 1,476; Irish, 240; English Channel, 110; German, 96; Levant, 72; Adriatic, 45; Baltic, 43. Bay of Biscay, 1,200; the Southern Ocean below Cape Horn reaches a depth of 5,500 yards, and off Cape of Good Hope, 5,700 yards.

The depth of the Great Lakes in feet: Superior (greatest depth), 1,200; Constance, 1,027; Huron, 1,000; Michigan, 990; Maggiore, 700; Zurich, 600; Ontario. 600; Baikal, 580; Wetter, 410; Wenner, 294; Erie, 80; Neagh, 42; St. Clair, 20.

DENSITY OF POPULATION. See Colored Diagram, page 19.

DEPENDENT CLASSES. The United States Census of 1880 showed a striking increase of this class, while the population but little more than doubled in 30 years, the number of defective persons returned is nearly five times as great as in 1850. There were 91,997 Insane, 76,895 Idiots, 48,928 Blind, and 33,878 Deaf Mutes, a total of 251,698.

DIAMONDS.

SCALE OF VALUE FOR SMALL STONES.

carat	$40	5 carat	$1,000
carat	$350	10 carat	$4,000

WEIGHT IN CARATS OF SIX LARGEST.

Kohinoor	103	Austrian Kaiser	139	Russian Czar	197
Star of Brazil	125	Regent of France	136	Rajah of Borneo	361

The value of the above is not regulated by size, nor easy to estimate, but no one of them is worth less than $500,000.

Cape diamonds are of inferior value; one of the largest, the Stewart, found in November, 1872, sold for $55,000, weighing 288 carats uncut. The Kimberley field, covering 9 acres, has produced diamonds to the value of 16 millions sterling since 1871, the diggings being from 100 to 170 feet deep. The annual export of diamonds from the Cape is about 1,400 lbs., worth over 20 million dollars, and the fields employ 2,000 white and 22,000 colored diggers.

DIET. The component parts of Animal Food are:—

	Fat.	Nitrogen.	Water.	Various	Total.
Lobster	1.2	19.2	75.6	3.0	100
Oyster	1.5	14.0	80.4	4.1	"
Turbot	2.9	18.1	78.0	1.0	"
Rabbit	8.2	13.9	73.2	9.7	"
Salmon	5.5	16.1	77.0	1.4	"
Milk	7.9	4.5	87.0	0.6	"
Eggs	10.5	14.0	74.0	1.5	"
Veal	15.8	16.5	63.0	4.7	"
Tripe	16.4	13.2	68.0	2.4	"
Beef	17.1	17.2	61.5	4.2	"
Mutton	18.1	15.3	62.5	4.1	"
Cheese	41.3	7.0	38.8	12.9	"
Pork	44.9	9.8	43.0	2.3	"
Bacon	63.3	8.8	25.0	2.9	"
Butter	81.0	5.0	11.0	3.0	"

COMPONENTS OF VEGETABLE FOOD.

	Starch.	Nitrogen.	Water.	Various.	Total.
Mushroom	3.5	4.7	91.0	0.8	100
Cabbage	4.0	1.8	92.0	2.2	"
Turnip	5.1	1.2	91.0	2.7	"
Carrot	5.5	0.7	87.3	6.5	"
Beer	9.2	0.9	89.7	0.2	"
Parsnip	9.6	1.1	82.0	7.3	"
Beet-root	11.3	5.0	82.7	1.0	"
Asparagus	11.8	1.2	86.0	1.0	"
Artichoke	14.7	3.1	76.0	7.2	"
Yam	16.0	2.0	74.0	8.0	"
Truffles	16.6	8.8	72.0	2.6	"
Sugar-cane	18.0	5.5	72.0	4.5	"
Banana	19.7	4.8	73.9	1.6	"
Potato	20.2	2.3	75.9	1.6	"
Breed	49.0	10.0	33.6	7.4	"
Beans	52.6	22.0	12.8	12.6	"
Peas	52.6	22.3	14.5	10.6	"
Tea	55.2	28.8	12.0	4.0	"
Lentils	56.0	25.2	11.5	7.3	"
Millet	59.0	9.3	12.2	19.5	"
Coffee	59.4	26.2	12.0	2.4	"
Wheat-flour	59.7	12.6	14.5	13.2	"
Oat-meal	63.8	12.6	15.0	8.6	"
Cocoa	71.0	24.0	4.0	1.0	"
Maize	71.2	9.9	13.5	5.4	"
Rye	73.2	8.0	15.0	3.8	"
Barley	74.3	6.3	15.0	4.4	"
Rice	79.5	6.3	13.0	1.2	"
Buckwheat	79.9	2.6	12.8	4.7	"

The relative value of food, Beef being par, is: Oysters, 22; Milk, 24; Lobsters 50; Cream, 56; Cod-fish, 68; Eggs, 72; Tarbot, 84; Mutton, 87; Venison, 89; Veal, 92, Fowl, 94; Herring, 100; Beef, 100; Duck, 104; Salmon, 108; Pork, 116; Butter, 124; Cheese, 155.

DIGESTION. The time required for digesting various kinds of food is:—

	Hours.	Min.		Hours.	Min.		Hours.	Min.
Rice	1	0	Lamb, broiled	2	30	Potatoes, boiled	3	30
Eggs, raw	1	30	Potatoes, baked	2	30	Butter	3	30
Apples	1	30	Beans, boiled	2	30	Cheese	3	30
Trout, boiled	1	30	Parsnips, boiled	2	30	Oysters, stewed	3	30
Venison, broiled	1	35	Oysters, raw	2	55	Eggs, hard	3	30
Sago, boiled	1	45	Eggs, boiled	3	0	Fowl, roast	4	0
Milk, "	2	0	Mutton, boiled	3	0	Beef, fried	4	0
Bread, stale	2	6	Beef, roast	3	0	Cabbage	4	30
Milk, raw	2	15	Bread, fresh	3	15	Wild Fowl	4	30
Turkey, boiled	2	25	Carrots, boiled	3	15	Pork, roast	5	15
Goose, roast	2	39	Turnips, boiled	3	30	Veal, roast	5	15

DIGESTIVE DISEASES. See *Diseases in the U. S.*

DIPLOMATIC. See *Consular and Diplomatic Service.*

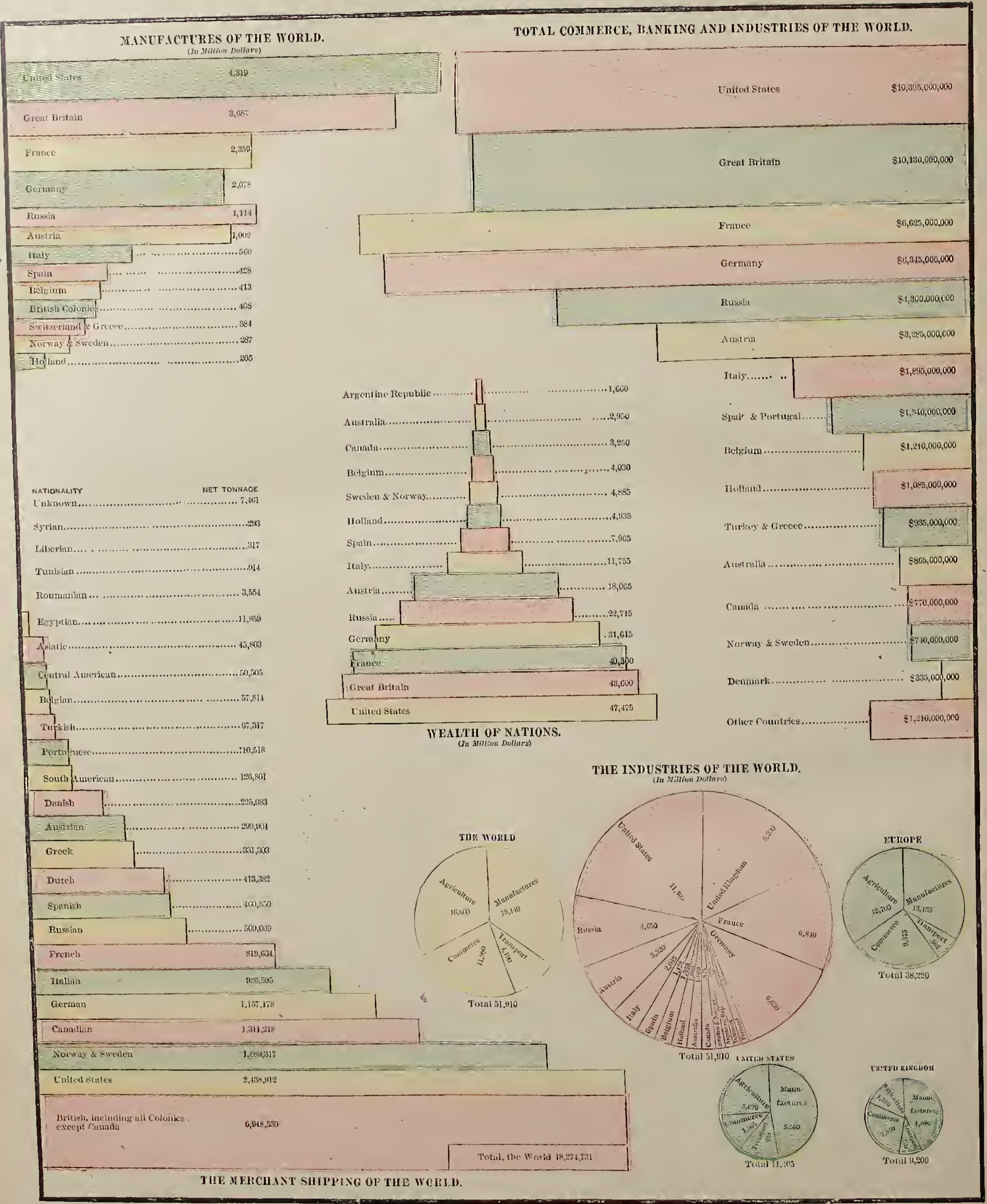
DIPTHERIA. See *Diseases in the United States.*

DISEASES in the United States. The number of deaths in the United States from census of 1880, is shown by the following table:—

CAUSE OF DEATH.	Number.	Per Million Inhabitants.	Ratio.
Measles	8,772	171	0.7
Whooping Cough	11,202	233	1.5
Scarlet Fever	16,416	328	2.1
Enteric Fever	22,905	458	3.1
Digestive Diseases	31,094	682	4.5
Diphtheria	38,398	768	5.1
Diarrhœa	65.565	1,311	8.7
Nervous Diseases	83,670	1,674	11.1
Consumption	91,551	1,831	12.2
Respiratory System	107.904	2,158	14.4
Various	276,416	5,521	36.6
Total	756,893	15,138	100.0

Of this total, 391,960 were males, 364,933 females.

It is supposed that 15 per cent. of all deaths escaped the notice of enumerators and that the real death rate in 1880 was 17.8 per 1,000, instead of 15.1 as given above.



MANUFACTURES OF THE WORLD.
(*In Million Dollars*)

TOTAL COMMERCE, BANKING AND INDUSTRIES OF THE WORLD.

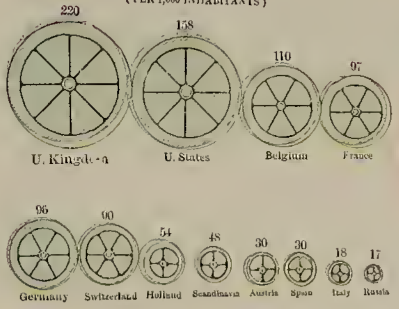
WEALTH OF NATIONS.
(*In Million Dollars*)

THE MERCHANT SHIPPING OF THE WORLD.

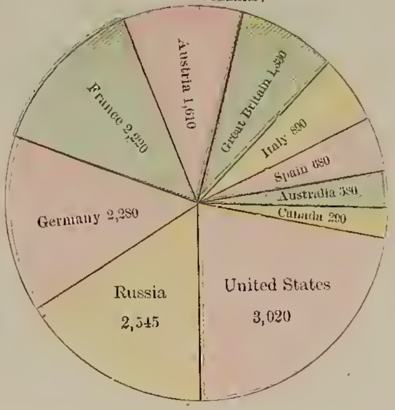
THE INDUSTRIES OF THE WORLD.
(*In Million Dollars*)

AGRICULTURE

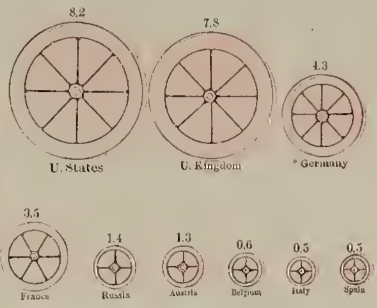
HORSE POWER
OF NATIONS
(PER 1,000 INHABITANTS)



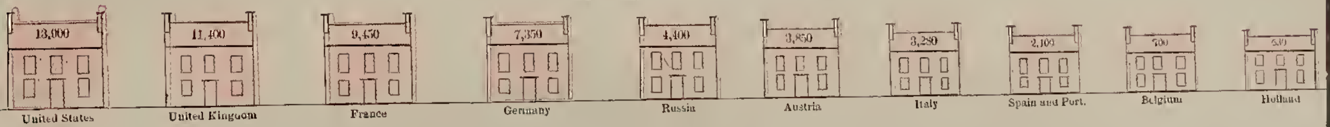
AGRICULTURAL AND PASTORAL PRODUCTS
(IN MILLION DOLLARS)



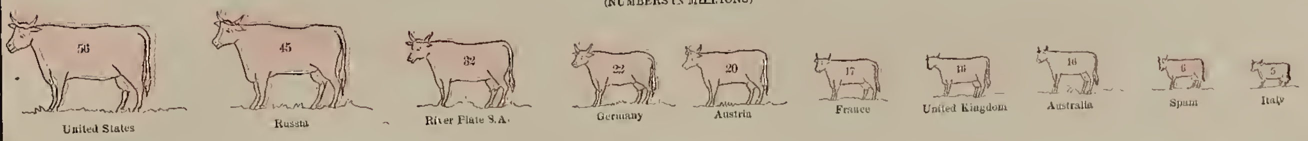
STEAM POWER
OF NATIONS
(IN MILLION HORSE POWER)
INCLUDES STATIONARY AND LOCOMOTIVE ENGINES



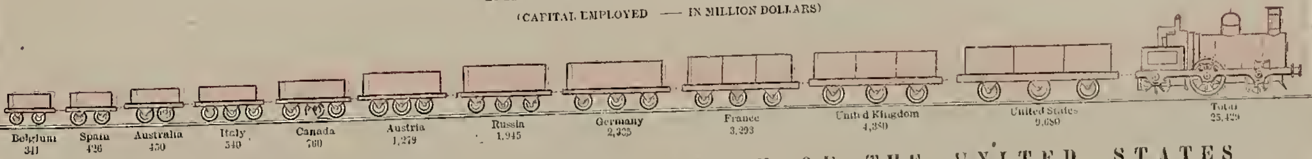
HOUSES OF THE WORLD
(VALUE IN MILLION DOLLARS)



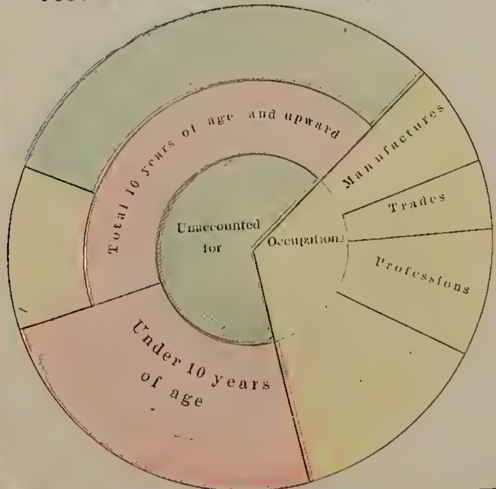
CATTLE OF THE WORLD
(NUMBERS IN MILLIONS)



RAILWAYS OF THE WORLD
(CAPITAL EMPLOYED — IN MILLION DOLLARS)

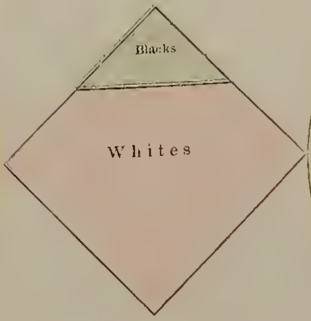


OCCUPATIONS OF THE UNITED STATES

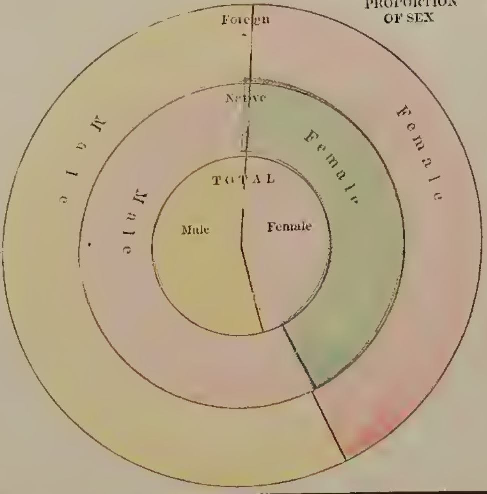


POPULATION OF THE UNITED STATES

PROPORTION OF COLOR



PROPORTION OF SEX



Consumption carried off, as compared with England, thus:—

	UNITED STATES. Males.	Females.		ENGLAND. Males.	Females.
Per 100 deaths	10½	14	Per 100 deaths	9	9½
Per 10,000 inhabitants	18	23	Per 10,000 inhabitants	19	19

The predisposing causes of disease are said to be: (1) Debilitating influences, (2) excitement, (3) previous disease, (4) present disease, (5) hereditary constitution, (6) temperament, (7) age, (8) sex, (9) occupation.

Professor Koch, of Berlin, discovered the cause of consumption in 1882. This cause of tuberculosis turns out to be a parasite, a minute colorless living particle, which its discoverer names the *bacillus* tuberculosis. By inoculation of the lower animals, Koch found that he could thus induce tuberculosis in any animal.

DISTILLED SPIRITS. The United States production from 1884 to date inclusive is as follows:—

	SPIRITS WAREHOUSED.						Spirits not Warehoused	
	Bourbon Whiskey.	Rye Whiskey.	Alcohol.	Rum.	High Wines.	Pure, Neutral, or Cologne Spirits.	Apple, Peach or Cider Brandy.	Aggregate.
	Gallons.	Gallons.	Gallons.	Gallons.	Gallons.	Gallons.	Gallons.	Gallons.
1884	8,896,832	5,089,958	12,385,729	1,711,158	6,745,688	*8,538,080	1 137,056	76,572,795
1885	12,257 753	5,828,143	13,436,916	2,081,165	3,235,889	27,105 382	1,468,575	76,381,138
1886	19,318,819	5,842,540	11,247,877	1,709,152	2,396,248	26 338,581	1,175,201	81,849,260
1887	19,015,081	7,313,640	10,337,035	1,856,223	2,410,923	27 036,219	*12,505,135	78,505,209
1888	7,463,609	5,879,690	11,075,689	1,891,216	1,016,136	29,475,913	*14,311,577	71,104,110
1889	21,960,781	8,749,368	10,937,135	1,171,054	1,029,495	30,439,354	*15,721,278	90,310,868
1890	32,471,784	13,355,577	11,354,449	1,527,808	555,572	31,022,649	*19,807,518	113,195,387
1891								

*Include Gallons, stated in Government Reports for later years, as "other" or "miscellaneous."

See Diagram, page 43.

DISTANCES Around the World.

	Miles.		Miles.
New York to San Francisco	3,450	Suez to Alexandria	250
San Francisco to Yokohama	4,764	Alexandria to Marseilles	1,300
Yokohama to Hong Kong	1,620	Marseilles to Paris	536
Hong Kong to Singapore	1,150	Paris to London	316
Singapore to Calcutta	1,200	London to Liverpool	205
Calcutta to Bombay	1,409	Liverpool to New York	3,000
Bombay to Aden	1,664		
Aden to Suez	1,308	Total	22,172

BY WATER FROM U. S. TO EUROPE, ETC.

	Nautical Miles.		Nautical Miles.
Boston to Queenstown	2,668	New York to Queenstown	2,798
Queenstown to Liverpool	248		

Sailing distance between San Francisco and Sandwich Islands, 2,080 nautical miles.

DIVORCES. The number of divorced and separated per 1,000 marriages in 1880 were: Switzerland, 51; United States, 45; Denmark, 30; Germany, 17; Austria, 10; Roumania, 10; France, 9; Netherlands, 8; Sweden, 7; Great Britain, 3; Italy, 3.

In France 58 per cent. of divorced couples had no children; 52 per cent. were married over 10 years.

In Switzerland for every 1,000 marriages there were 13 divorces in Catholic cantons, 59 in Protestant, and 51 in mixed. General average, 51 per 1,000.

The greatest number of divorced persons occur in Protestant or mixed countries. In Austria the mixed provinces had 12 times more divorces to population, and the Protestant 28 times more, than in Catholic provinces. The rate of suicide has risen in all countries in which divorces increased.

DOGS. The brain of dogs in drams is: Sheep dog, 29.5; Foxhound, 29.2; Setter, 26.1; Mastiff, 26.1; Retriever, 25.7; Collie, 25.4; Bulldog, 24.0; Newfoundland, 24.0; Greyhound, 23.4; Terrier, 20.0; Spaniel, 18.1; Lap dog, 18.0. As compared with the above the wolf has 42, the jackal 15, the fox 13 drams.

It is found that 100 male dogs go mad compared with 14 female.

DOLLAR. The following is a brief history of the standard silver dollar. It was authorized to be coined Act of April 2, 1792. Weight, 416 grains, standard silver; fineness, 892.4; equivalent to 371¼ grains of fine silver, with 44¾ grains alloy of pure copper. Weight changed, Act of January 18, 1837, to 412½ grains, and fineness changed to 900, preserving the same amount of pure silver—371¼ grains, with 1-10 alloy. Coinage discontinued, Act of February 12, 1873.

Total amount coined from 1792 to 1873, $8,045,838.

Coinage revived, two million dollars per month required to be coined, and issue made legal tender for all debts, public and private, Act of February 28, 1878.

Total amount coined, February 28, 1878, to November 1, 1886, $213,257,594.

The Trade Dollar was authorized to be coined, Act of February 12, 1873. Weight, 420 grains; fineness, 900. Total amount coined to June 30, 1877, $24,581,350.

The Half Dollar authorized to be coined, Act of April 2, 1792. Weight, 208 grains; fineness, 892.4. Weight changed, Act of January 18, 1837, to 206¼ grains. Fineness changed, Act of January 18, 1837, to 900. Weight changed, Act of February 21, 1853, to 192 grains. Weight changed, Act of February 12, 1873, to 12½ grams, or 192.9 grains. Total amount coined to June 30, 1877, $118,869,540.50.

The Quarter Dollar, authorized to be coined Act of April, 2, 1792. Weight, 100 grains; fineness, 892.4. Fineness changed, Act of January 18, 1837, to 900. Weight changed, Act of February 21, 1853, to 96 grains. Weight changed, Act of February 12, 1873, to 6¼ grams, or 96.45 grains. Total amount coined to June 30. 1877, $34,774,121.50.

The Twenty-cent Piece authorized to be coined, Act of March 3, 1875. Weight 5 grams, or 77.16 grains; fineness, 900. Total amount coined to June 30, 187 $279,418. See *Coin.*

DRINK. The following table exhibits the drink of all nations:—

Countries.	Millions of Dollars.				Alcohol, Gallons per inhabitant.
	Wine.	Beer.	Spirits.	Equivalent in Spirits.	
Great Britain	15	1,007	37	67.2	1.92
United States	30	440	76	66.5	1.31
France	760	190	34	101.0	2.65
Germany	120	880	60	72.4	1.60
Russia	30	63	145	80.6	1.05
Austria	300	245	30	53.0	1.45
Italy	480	20	10	50.2	1.76
Spain	220	2	3	24.0	1.48
Portugal	60	1	1	7.0	1.55
Holland	3	35	12	8.2	2.05
Denmark	1	25	8	5.1	2.60
Belgium	4	170	10	11.4	2.07
Norway and Sweden	2	35	27	15.4	2.27
British Colonies	108	81	20	25.2	1.80
Total	2,133	3,194	473	587.2	1.70

Mulhall states that the following is the ratio of dipsomaniacs to all insane: United States, 26 per cent.; Scotland, 28 per cent.; France, 21 per cent.; Italy, 12 per cent.

DRUNKENNESS. The relative mortality of Drink, or years of intemperance to produce death among women is, 14; gentlemen, 15; working class, 18. Beer produces death in 22 years; spirits, 17; mixed drinks, 16. This shows that the working class can stand drink longest, and that beer is the least deadly form of intemperance.

The value of life drunk or sober is as follows: At 20 years of age, sober, 44 years; drunk, 15; at 30, sober, 36; drunk, 14; at 40, sober, 29; drunk, 11.

See *Deaths from Drink.*

DUKES. There are (1881) 22 Dukes in England, 2 in Ireland, 8 in Scotland.

See *Peers.* House of

DURABILITY of Different Woods. Experiments have been lately made by driving sticks, made of different woods, each two feet long and one and one-half inches square, into the ground, only one-half an inch projecting outward. It was found that in five years, all those made of oak, elm, ash, fir, soft mahogany, and nearly every variety of pine, were totally rotten. Larch, hard pine and teak wood were decayed on the outside only; while acacia, with the exception of being also slightly attacked on the exterior, was otherwise sound. Hard mahogany and cedar of Lebanon were in tolerably good condition; but only Virginia cedar was found as good as when put in the ground. This is of some importance to builders, showing what woods should be avoided, and what others used by preference in underground work.

The duration of wood when kept dry is very great, as beams still exist which are known to be nearly 1,100 years old. Piles driven by the Romans prior to the Christian era have been examined of late, and found to be perfectly sound after an immersion of nearly 2,000 years.

The wood of some tools will last longer than the metals, as in spades, hoes and ploughs. In other tools the wood is first gone, as in wagons, wheelbarrows and machines. Such wood should be painted or oiled; the paint not only looks well, but preserves the wood; petroleum oil is as good as any other.

Hard wood stumps decay in five or six years; spruce stumps decay in about the same time; hemlock stumps in eight to nine years; cedar, eight to nine years; pine stumps, never.

Cedar, oak, yellow pine and chestnut are the most durable woods in dry places.

DURATION of Life. See *Life.*

DUTIES. Customs of the United States:—

Animals for breeding purposes.	free on Consular Certificate.	Clothing, All other descriptions	50 per cent.
" otherwise	20 per cent.	Coal and Coke, bituminous	75 cts. per ton.
Ale, Porter and Beer in bottles.	40 cts. per gallon.	Coral, cut or manufactured	25 per cent.
" " " in casks	20 cts. per gallon.	Cutlery, table, etc.	35 per cent.
Books, Charts, new	25 per cent.	" Pen, Jack and Pocket Knives	50 per cent.
" " for colleges, libraries, or printed more than 20 years, or in use abroad more than 1 year and not for sale.	free.	Diamonds and other precious stones	25 per cent.
Boots, Shoes, Leather	25 per cent.	Unset	10 per cent.
Bronse, manufacture of.	40 per cent.	Effects, personal, old	free on oath.
Carpets, Aubusson, Axminster and all woven whole for room	60 cts. per sq. yd. and 40 per cent.	Engravings	25 per cent.
" Brussels, Tapistry printed on the warp or otherwise.	28 cts. per sq. yd. and 40 per cent.	Furniture	35 per cent.
" Brussels, wrought by the Jacquard machine	44 cts. per sq. yd. and 40 per cent.	Furs, manufactured	20 per cent.
" Saxony Wilton & Tourney Velvet, wrought by the Jacquard machine	60 cts. per sq. yd. and 40 per cent.	Gilt and Plated Ware, etc.	60 per cent.
" Treble Ingrain, 3-ply, and Worsted China Venetian	19 cts. per sq. yd. and 40 per cent.	Glass Ware	60 per cent.
" Velvet, Patent or Tapestry, printed on the warp or otherwise	40 cts. per sq. yd. and 40 per cent.	Gloves, Kid	50 per cent.
Carriages	45 per cent.	Gold and Silver Ware, etc.	45 per cent.
China—Porcelain and Parian Ware, plain	55 per cent.	Guns	25 per cent.
" Gilded, ornamented, or decorated	60 per cent.	Hats, (ladies), chip, straw or other vegetable substance, hair, whalebone	30 per cent.
Cigars, Cheroots and Cigarettes	$4.50 per lb., and 25 per cent.	" Trimmed with silk and artificial flowers exceeding the value of the hat	50 per cent.
Clocks	35 per cent.	" With feathers and artificial flowers	50 per cent.
Clothing, wholly or in part of wool	50 cts. per lb. and 60 per cent.	Hay	$4 per ton.
" Linen	40 per cent.	Household effects, in use abroad one year and not for sale	free.
" Silk component	60 per cent.	Instruments, professional, in use	free.
		Iron, Pig and Scrap	$6.72 per ton
		Jewelry, Gold, Silver or Imitation	50 per cent.
		" Jet and Imitations of	25 per cent.
		Laces, Silk	60 per cent.
		" Silk and Cotton	50 per cent.
		" Thread	35 per cent.

DUTIES. Customs of the United States, continued:—

Article	Duty	
Leather, manufactures of	35 per cent.	
Linen, Table, Towelling, etc.	35 per cent.	
" " "	35 per cent.	
Machinery, Brass or iron	45 per cent.	
" Copper or steel	45 per cent.	
Musical Instruments	25 per cent.	
Oils—Animal	8 cts. a gallon.	
" Castor	80 cts. a gallon.	
" Olive	35 cts. a gallon.	
Paintings	30 per cent.	
" If work of an American artist	free.	
Frames for ditto	35 per cent.	
Photographs	25 per cent.	
Pipes—Meerschaum, Wood and of all other material except common clay	70 per cent.	
Prints or Engravings	25 per cent.	
Rubber Boots, Shoes, and other articles wholly of rubber (not fabrics)	35 per cent.	
" Braces, Suspenders, Webbing, etc., used in part silk	50 per cent.	
" Silk, Cotton, Worsted, or Leather	30 per cent.	
Saddles and Harness	35 per cent.	
Shawls—Silk	60 per cent.	
" Camel's hair or other wool	50 cts. per lb. and 60 per cent.	
Silk—Dress and Piece	50 per cent.	
Smokers' Articles	70 per cent.	
Snuff	50 cts. per lb.	
Soap, Castile	1 1-4 cts. per lb.	
" Fancy, Perfumed Toilet, and Windsor	15 cts. per lb.	
Statuary, Marble	15 per cent.	
Stereoscopic Views, on glass or paper	40 and 25 per cent respectively.	
Spirits, Brandy, Whisky, Gin, etc.	$2.50 per proof gal	
Umbrellas, Silk or Alpaca	55 per cent.	
Velvet, Silk	45 per cent.	
" Cotton or mostly cotton.	45 per cent.	
Watches	25 per cent.	
Wines—All still wines, such as Sherry, Claret, Hock, in casks	50 cts. per gal.	
Ditto in bottles of a pint and less	$1.60 per gal.	and 3 cents per bottle
Ditto in bottles of over 1 pt. and less than 1 quart	1.60 per case.	
All Champagnes and Sparkling Wines in bottles of ½ pint or less	2.00 per doz.	
Ditto in bottles of over ½ pt. and not more than 1 pint.	4.00 per doz.	
Ditto in bottles of over 1 pt, and not more than 1 qt.	8 00 per doz.	
Ditto in bottles of over 1 quart (extra).	8.00 per doz.	

DUTIES. Articles admitted into the United States free of duty:—

Actors' Costumes and Effects intended for personal use.
Animals for breeding purposes.
Antiquities not for sale.
Articles and Tools of Trade.
Art Works of American Artists.
Bed Feathers.
Birds, Land and Water Fowl.
Books printed over 20 years.
Coal, Anthracite.
Cocoa.
Coffee.
Collections of Antiquities, etc., for use in Colleges, Museums, Incorporated Societies, etc.
Diamonds, rough.
Effects of American citizens, dying abroad, if accompanied by Consular certificate.
Engraving (engraved over 20 yrs)
Farina.
Fertilizers.
Fish for bait.
Furs, undressed.
Hides, raw.
Household Effects in use abroad over one year and not for sale.
India Rubber.
Mineral Waters, natural.
Minerals crude.
Natural History Specimens (not for sale.)
Newspapers.
Periodicals.
Personal Effects when old and in use over one year.
Plants, Trees and Shrubs.
Rags, other than Wool.
Rubber, crude.
Scientific Instruments.
Skins, raw.
Tapioca.
Tea.
United States Manufactures forwarded to Foreign Countries and returned.
Wax, Vegetable and Mineral.

The Customs Tariff Of Great Britain.

No protective duties are now levied on goods imported, Customs duties being charged solely for the sake of revenue. Formerly the articles subject to duty numbered nearly a thousand, now they are only twenty, the chief being tobacco, spirits, tea and wine. The following is a complete list:

From the Statistical Abstract of the United Kingdom.

ARTICLES.	Duty. £	s.	d.
Ale or beer, the worts of which were before fermentation of a specific gravity of 1057°; per bbl. And so in proportion for any difference of gravity	0	6	6
Beer, Mum and Spruce, specific gravity not exceeding 1215°; per barrel of 36 gallons	1	6	0
Beer, Mum and Spruce, exceeding 1215° per barrel	1	10	6
Cards, playing; per dozen packs	0	3	9
Chicory, (raw or kiln-dried); cwt	0	13	3
Chicory, (roasted or ground); lb	0	0	2
Chloral hydrate; pound	0	1	3
Chloroform; pound	0	3	0
Cocoa; pound	0	0	1
Cocoa, husks and shells; cwt	0	2	0
Cocoa, or chocolate, ground, prepared or manufactured; pound	0	0	2
Coffee, raw; cwt	0	14	0
Coffee, kiln-dried, roasted or ground; pound	0	0	2
Collodion; gallon	1	4	0
Ethyl, iodide of; gallon	0	13	0
Ether, sulphuric; gallon	1	5	0
Fruit, dried: cwt	0	7	0
Plate, gold; ounce	0	17	0
Plate, silver; ounce	0	1	6
Soap, transparent, containing alcohol; pound	0	0	3
Spirits of any description (except perfumed spirits), including Naphtha or Methylic Alcohol, purified so as to be potable; and mixtures and preparations containing spirits; computed at hydrometer proof; gallon	0	10	4
Spirits, perfumed and cologne water; gallon	0	16	6
Spirits, liqueurs, cordials, (or other preparations containing spirits in bottle, entered in such a manner as to indicate that the strength is not to be tested), unenumerated, sweetened or mixed	0	14	0
Tea; pound	0	0	6
Tobacco, unmanufactured, stemmed or unstemmed, containing 10 per cent. or more of moisture; pound	0	3	6
Containing less than 10 per cent. of moisture; pound	0	3	10
Cavendish or Negro-head	0	4	10
Cigars; pound	0	5	6
Other manufactured tobacco	0	4	4
Snuff, containing more than 13 per cent. of moisture; pound	0	4	1
Snuff, less than 13 per cent. of moisture per pound	0	4	10
Wine, containing less than 30° proof spirit; gallon	0	1	0
Wine, containing more than 30° and less than 42° proof spirit; gallon	0	2	6
Wine, for each additional degree of strength beyond 42°; gallon	0	0	3

DUTIES, Import. The general average of import duties is shown by the accompanying table:—

	Ratio to Imports. per cent.		Ratio to Imports. per cent.
United Kingdom	5½	Belgium	1½
France	6½	Denmark	9
Germany	6	Sweden and Norway	12
Russia	18	Europe	7½
Austria	5	United States	45
Italy	11	Canada	15
Spain	24	Australia	13
Portugal	26	Brazil	44
Holland	1	Argentine Republic	37

DWELLINGS. In 1880 there were 9,945,916 families in the United States, averaging 5.04 persons to a family; living in 8,955,812 dwellings, averaging 5.60 persons to a dwelling.

The number of dwellings in the larger cities of the United States is: Philadelphia, 146,412; New York, 72,684: Brooklyn, 62,233; Chicago, 61,069; Baltimore, 50,833; Boston, 43,944; St. Louis, 43,026; New Orleans, 36,347; San Francisco, 34,110; Cincinnati, 28,017; Pittsburgh, 24,239; Washington, 24,107; Buffalo, 23,680; Detroit, 20,493.

The number of dwellings in the several countries is, thousands omitted: Russia, 9,150; United States, 8,956; France, 8,813; Great Britain, 6,452; Austria, 6,280; Germany, 5,880; Italy, 4,420; Spain and Portugal, 3,810; Scandanavia, 1,200; Belgium; 1,060; Holland, 720.

The average persons per dwelling is: Russia, 9.1; United States, 5.6; France, 4.3; Great Britain, 5.4; Austria, 5.9; Germany, 7.7; Italy, 6.3; Spain and Portugal, 5.4; Scandanavia, 6.9; Belgium, 5.1; Holland, 5.5.

See Colored Diagram, page 39.

OYING. Chances of See *Life.*

EARTH. The polar diameter of the earth is about 7,900 miles, and the equatorial 7,926½; a difference of about 26½ miles. The first voyage around the world was made by Magellan in the 16th century; the second by Captain Cook, in the 18th century. Magellan sailed from Spain September 15, 1519, and returned in September, 1522.

EARNINGS, or Income of Nations.

Countries.	Million Dollars. 1870.	Million Dollars. 1880.	Increase, Million Dollars.	Ratio per Inhabitant. 1870.	Ratio per Inhabitant. 1880.	Ditto Free of Taxes. 1870.	Ditto Free of Taxes. 1880.
United States	5,167	7,327	2,160	$134 18	$135.85	$176.23	$123.03
Great Britain	4,675	5,624	949	148.55	163.05	129.11	143.66
France	3,834	4,510	676	100 86	112.14	85.66	90.59
Germany	3,415	4,140	725	90 04	91.10	81.85	80.19
Russia	2,754	3,075	321	38 34	38.43	32.51	32.23
Austria	1,961	2,238	277	54 14	57.32	45 49	47.44
Italy	1,134	1,226	92	42.85	43.21	30 67	29.51
Spain	774	905	131	46.99	54.86	36 85	43.58
Belgium	491	574	83	97.79	102 98	86.42	89.71
Holland	433	506	73	123.67	126.77	107.74	109.60
Sweden, Norway	433	511	78	72.15	78.59	66.95	71.31
Denmark	185	214	29	107.08	102.52	97.34	99.29
Portugal	156	170	14	39 00	39.08	31.94	30.36
Turkey, Greece &c	457	404	......	20.68	19.46	17.64	16.87
Australia	307	433	126	168.33	151.30	141 81	123 58
Canada	457	574	117	121.95	134.72	113.84	124 46
South Africa	63	88	25	70.54	65.20	65.28	52.16
South America	803	920	117	32.62	37.24	25.38	29.94
The World	27,499	33,439	5.939	$ 70.00	$ 78 35	$ 62.15	$ 66.94

EARTHQUAKES. In 1858 the British Association published an exhaustive description "Catalogue of Earthquakes from 1666 B. C. to A. D. 1842." The subjoined whose dates are included in that period have been selected from the British catalogue. Since the beginning of the 18th century the most destructive have been:—

Year.	Place.	Lives Lost.	Year.	Place.	Lives Lost.
1703	Jeddo, Japan	190,000	1812	Caracas, March 26	12,000
1706	Abruzzi, Nov. 3	15,000	1822	Aleppo, Aug. 10	22,000
1716	Algiers, May or June.	20,000	1829	Murcia, March 21	6,000
1726	Palermo, Sept. 4	6,000	1851	Melfi, Aug. 14	14,000
1731	Peking, Nov. 30	100,000	1857	Calabria, * Dec. 16	10,000
1746	Lima, Oct. 28	18,000	1859	Quito, March 22	5,000
1754	Cairo, Sept	40,000	1859	Erzeroum, June 2	15,000
1755	Kaschau, June 7	40,000	1860	Mendoza, March 20	12,000
1755	Lisbon, Nov. 1	50,000	1868	Arequipa, Aug. 13	25,000
1759	Syria, Oct. 30	20,000	1875	Cucuta, May 16	14,000
1773	Guatemala, June 7	35,000	1880	Manilla, July 18	3,000
1780	Manris	75,000	1883	Java, Aug. 26	50,000
1783	Messina, Feb. 4	60,000	1886	Charleston, Aug 31.	47
1797	Quito, Feb. 4	40,000	1887	Nice, Feb.	3,000
1805	Naples, July 26	6,000			

*In the course of 75 years from 1783 to 1857, the kingdom of Naples lost, at least, 111,000 inhabitants by the effects of earthquakes, or more than 1,500 per year, out of an average population of 6,000,000.

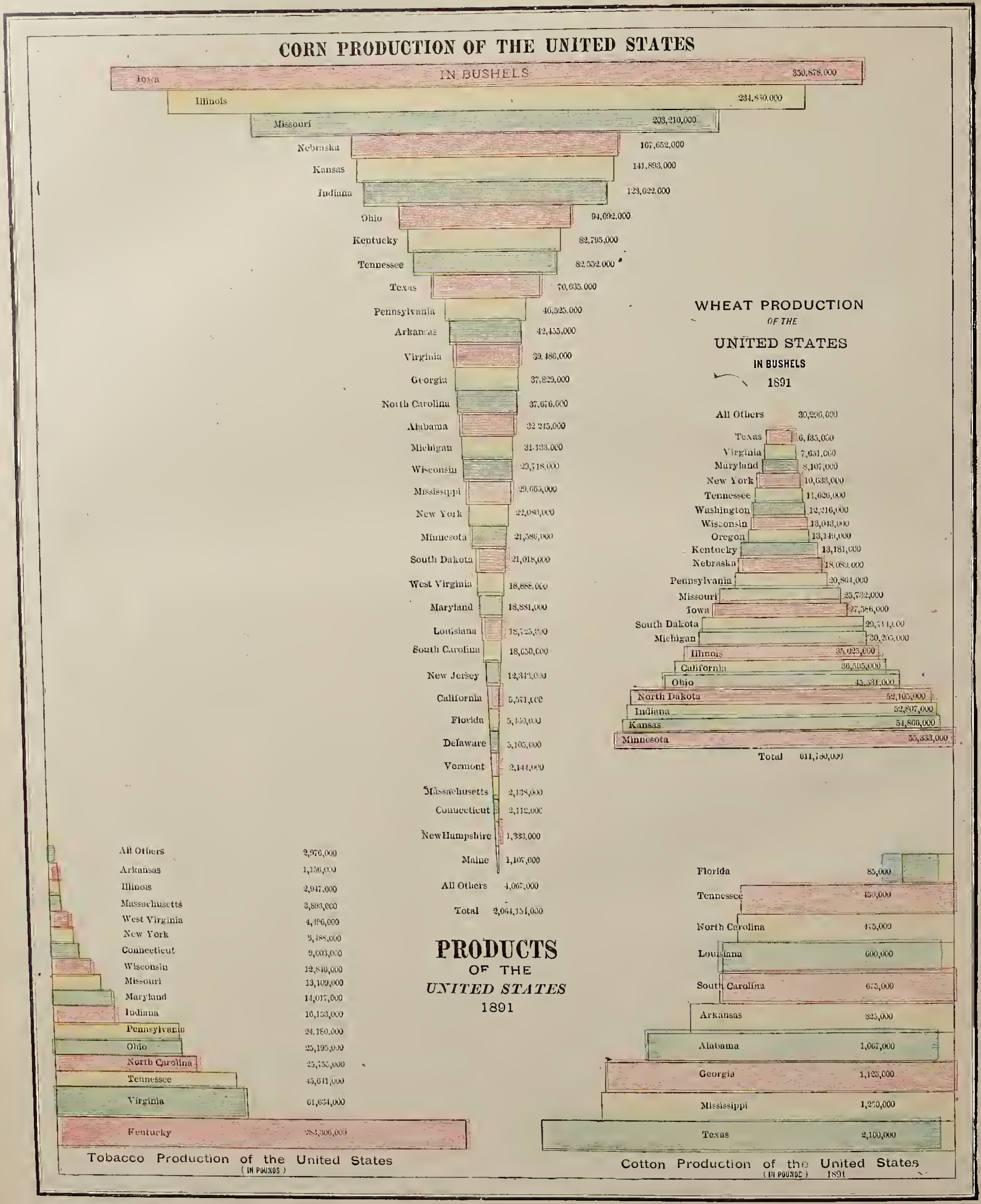
EARTHENWARE AND CHINA. The United States imported in 1886, $4,092,215 worth, paying $2,829,540 customs for same.

ECLIPSES. The first eclipse ever recorded (lunar) was accurately observed at Babylon, B. C. March 19, 721. The Egyptians claim to have discovered 373 solar eclipses and 832 lunar eclipses before B. C. 323. The Chinese claim to have known the true theory of eclipses B. C. 120. The Ninevah eclipse (sun) recorded on a Ninevah tablet, B. C. June 15, 763. That predicted by Thales believed to have occurred B. C. May 28, 585. Eclipse of Xerxes when setting out on his expedition against Greece, B. C. February 17, 478.

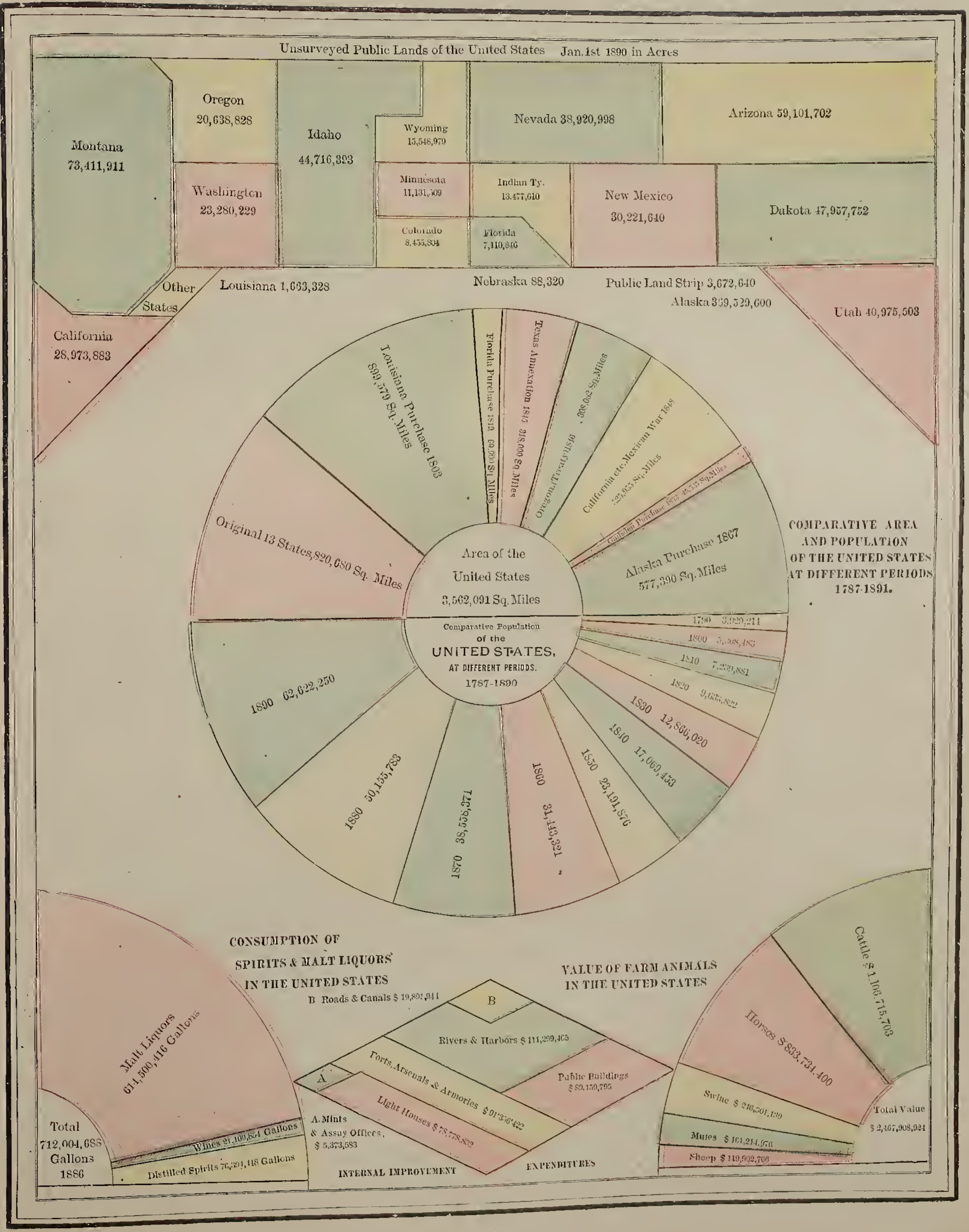
EDUCATION. The following table shows the progress of education in the several countries during the past 50 years:—

	Ratio of Adults able to Write. 1830.	Ratio of Adults able to Write. 1850.	Ratio of Adults able to Write. 1881.	Ratio of School Children to Population. 1890.	Ratio of School Children to Population. 1350.	Ratio of School Children to Population. 1881.
United States	80	84	90	15	17	18
England	55	64	84	7	8	15
Scotland	77	83	88	9	10	15
Ireland	46	55	67		6	18
France	42	57	78	6	9	13
Germany	81	86	94	16	16	17
Russia	1	2	11	..	1	2
Austria	28	34	49	5	6	9
Italy	16	28	41	2	4	8
Spain and Portugal	9	18	34	3	4	5
Switzerland	78	80	88	13	14	16
Belgium and Holland	41	62	86	10	11	15
Scandinavia.	80	82	87	13	14	15

The ratio of school children attending school is usually two-thirds of those enrolled (in Ireland less than half), so that the number of children at school compared to population is only 11 per cent. in England, 9 per cent. in France, and 12 per cent in United States.



PRODUCTS
OF THE
UNITED STATES
1891



Unsurveyed Public Lands of the United States Jan. 1st 1890 in Acres

COMPARATIVE AREA AND POPULATION OF THE UNITED STATES AT DIFFERENT PERIODS 1787-1891.

CONSUMPTION OF SPIRITS & MALT LIQUORS IN THE UNITED STATES

INTERNAL IMPROVEMENT EXPENDITURES

VALUE OF FARM ANIMALS IN THE UNITED STATES

EDUCATION. The following table gives statistics of the Elementary Education in the principal countries of the world:—

Countries.	Date of report	Population.	School age.	School population.	No. of Schools.	Number of Pupils.	No. of Teachers.
United States	1890	62,622 250	*4-21	17,107,655	219,063	12,361,785	347,292
Algeria	1877	‡ 344,749	6-13	58,000	662	51,592	1,260
Alsace Lorraine	1878	1,531,804	9-14	259,620	2,734	217,619	4,364
Argentine Rep	1876	2,121,775	6-14	503,078	1,946	116,244	5,893
Austria	1878	21,752,000	6-14	3,122,863	15,166	2,134,683	31,196
Baden	1873	1,507,179	6-14	243,567	1,937	245,369	3,603
Bavaria	1871	5,022,390	6-14	745,251	7,184	841,304	11,921
Belgium	1878	5,403,006	6-13	772,076	5,729	687,749	11,808
Brazil	1874	12,000,000	....	....	5,890	187,915	....
Bremen	1878	142,645	6-14	17,892	52	17,315	400
British Burmah	1880	3,154,470	....	....	3,124	80,292	....
British Columbia	1878	38,500	5-16	2,734	51	2,924	58
British India§	1867	186,000,000	....	....	14,705	615,744	....
Denmark	1874	1,9'0,000	6-14	240,500	2,940	231,953	3,464
Egypt	1879	16,952,000	...	....	5,562	167,175	....
England and Wales	1879	25,165,335	*a*3-15	*b*2,500,000	*d*17,166	*e*3,710,883	*g*69,527
Finland	1878	1,941,253	7-16	342,286	493	20,279	532
France	1877	36,905,788	6-13	6,409,087	71,547	4,716,935	110,709
Greece	1874	1,457,894	..	240,000	1,227	81,440	1,205
Hamburg	1878	388,618	6-14	44,310	230	48,348	1,826
Hawaiian Islands	1875	56,897	....	....	242	7,755	....
Hungary	1877	15,666,000	6-14	2,127,950	15,486	1,559,636	20,717
Ireland	1879	5,411,416	....	....	7,522	1,031,995	10,489
Italy	1876	26,801,000	6-12	4,527,582	47,471	1,931,617	47,085
Jamaica	1879	510,354	....	....	646	52,243	....
Japan	1877	34,245,323	6-14	5,251,807	25,459	2,162,962	59,825
Luxemburg	1876	204,000	6-13	33,000	673	30,477	660
Mexico	1875	9,176,082	....	....	8,103	349,000	....
Netherlands	1878	3,583,529	6-13	596,791	3,813	486,737	12,292
New Brunswick	1878	302,371	5-15	51,684	1,395	54,472	....
New South Wales	1878	662,212	....	....	1,187	128,125	1,824
Norway	1875	1,813,424	6-14	302,000	4,736	261,622	4,030
Nova Scotia	1879	415,270	....	....	1,935	84,356	2,011
Ontario	1879	1,733,236	5-16	494,424	5,123	487,012	6,596
Portugal	1876	4,188,410	6-13	615,949	4,510	198,131	....
Prussia	1871	25,742,404	6-14	4,396,738	34,988	4,007,776	57,936
Quebec	1879	1,231,829	5-16	....	4,282	239,808	6,132
Queensland	1879	195,092	....	....	314	41,380	924
Roumania	1878	5,000,000	6-13	700,000	2,319	108,824	3,651
Russia	1876	78,500,000	6-14	*c*15,000,000	28,357	1,213,325	....
Saxony	1878	2,760,586	6 14	448,814	2,134	451,324	7,219
Scotland	1879	3,358,613	5 13	561,600	3,003	508,452	9,477
Servia	1874	1,338,505	....	....	507	22,756	627
South Australia	1879	213 271	....	....	340	39,127	788
Spain	1870	16,507 000	6-13	2,603,265	28,117	1,410,476	29,022
Sweden	1876	4,485,542	6-14	765,645	8 770	598,354	9,311
Switzerland	1871	2,669,147	*d*6-14	441,794	5,008	411,754	10,156
Tasmania	1878	99,328	....	....	164	12,453	....
Victoria	1879	867,634		....	1,664	231,169	4,006
Wurttemberg	1876	1,881,505	6-14	295,923	3,955	....	5,887

*There are 15 different school ages in the United States; the longest extends from 4 to 21, the shortest from 8 to 16, and the average length of the school period is 13½ years.

† Several States do not report this item separately.

‡ European population.

§ Exclusive of British subjects.

a Including infant schools.

b Estimated number of children between the ages of 7 and 13.

d Day schools, including infant schools.

e Of these 3,710,883 pupils 1,208,016 were between the ages of 3 and 7, 2,333,973, between 7 and 13, and 168,894 were above 13 years of age.

g 29,716 certificated, 6,616 assistant, and 33,195 pupil teachers.

c Estimated number of children between the ages of 6 and 14.

d The school age is fixed by the local school authorities.

STATISTICS OF EXPENDITURES FOR PUBLIC SCHOOLS IN THE UNITED STATES IN 1889.

From Report of the Commissioner of Education.

STATES AND TERRITORIES.	Salaries of Teachers.	Total Expenditures.	STATES AND TERRITORIES.	Salaries of Teachers.	Total Expenditures.
	Dollars.	Dollars.		Dollars.	Dollars.
Alabama	553,758	712,808	Montana	225,000	285,575
Alaska*	....	....	Nebraska	1,682,093	3,038,091
Arizona	100,222	130,212	Nevada	106,874	128,285
Arkansas	790,133	901,191	New Hampshire	474,401	686,491
California	3,083,027	4,387,527	New Jersey	1,638,·92	2,665,938
Colorado	586,242	1,152,112	New Mexico	28,002	28,973
Connecticut	1,264,061	1,813,823	New York	9,676,092	14,980,811
Delaware	178,086	269,528	North Carolina	547,693	700,000
District of Columbia	437,686	795,019	North Dakota**	937,7 9	1,790,968
Florida	449,000	484,130	Ohio	6,382,370	9,914,621
Georgia	644,199	751,662	Oklahoma†	....	....
Idaho	92,911	138,663	Oregon	424,935	670,896
Illinois	6,714,517	10,279,371	Pennsylvania	6,404,895	11,012,991
Indiana	3,466,173	5,255,083	Rhode Island	519,184	825,072
Indian Territory*	....	....	South Carolina	385,257	430,669
Iowa	4,106,102	6,087,093	South Dakota	....	....
Kansas	2,677,513	4,703,648	Tennessee	887,669	1,023,893
Kentucky	1,416,840	1,754,107	Texas	2,397,633	2,728,172
Louisiana	446,165	514,270	Utah	163,462	241,270
Maine	773,287	1,238,898	Vermont	473,309	650,392
Maryland	1,344,506	1,828,178	Virginia	1,186,353	1,558,353
Massachusetts	5,114,402	6,918,479	Washington	218,633	305,365
Michigan	2,951,472	4,730,665	West Virginia	780,713	1,234,578
Minnesota	1,942,666	3,844,684	Wisconsin	2,258,515	3,190,010
Mississippi	806,525	839,797	Wyoming	81,908	118,908
Missouri	3,172,097	4,357,636			

*Statistics not obtained. **North and South Dakota. †School system being organized.

By comparing "total expenditure" with school population, the following results appear. Massachusetts expends $18.69 per capita, in the education of its school population; California, $15.62; District of Columbia, $15.42; Colorado, $15.12; Nevada, $12.80; Rhode Island, $12.00. These are the highest six The lowest six are: New Mexico, $ .66; North Carolina, $1.19; Georgia, $1.34; Alabama, $1.36; Louisiana $1.53; Mississippi, $1.80.

Public School Statistics of the United States in 1890.

From the Report of the Commissioner of Education.

States and Territories.	School Age.	School Population.	Number Enrolled.	Average Daily Attendance.	Number of Days in the School Year.
Alabama	7-21	522,691	292,052	175,168	82.4
Alaska	....	....	....	....	....
Arizona	6-18	12,882	7,989	4,702	....
Arkansas	6-21	405,587	205,262	123,157	....
California	5-17	280,882	198,960	146,789	140
Colorado	6-21	76,212	50,745	31,516	*b* 171 :108
Connecticut	4-16	159,241	126,505	*c*83,650	179.18
Delaware	6-21	....	31,434	19,649	*a. d.* 157.1
District of Columbia	(*a*)6-17	51,500	36,906	*i*28,184	....
Florida	(*a*)4-21	113,647	92,472	*i* 64,819	95
Georgia	6-18	560,281	342,496	230,384	....
Idaho	5-21	25,741	14,311	8,586	....
Illinois	6-21	1,144,044	778,319	538,·10	152
Indiana	6-21	770,723	512,955	342,275	126
Indian Territory	....	....	....	....	....
Iowa	5-21	660,495	493,267	306,309	144
Kansas	5-21	509,614	391,420	237,900	116.5
Kentucky	6-20	676,806	330,986	222,554	102
Louisiana	6-18	336,137	132,593	92,066	*f* 110:108
Maine	4-21	212,004	143,113	98,642	106
Maryland	6-21	....	184,251	102,351	198
Massachusetts	5-15	370,116	371,492	273,910	184
Michigan	5-20	640,069	423,604	279,900	141.83
Minnesota	5-21	....	280,960	127,025	116
Mississippi	5-21	464,474	325,862	300,790	*g* 785 .180
Missouri	6-20	865,364	611,541	376,977	197
Montana	6-21	28,963	16,980	10,614	102
Nebraska	5-21	332,243	240,300	146,139	120
Nevada	6-18	10,022	7,387	5,064	148.6
New Hampshire	5-21	....	60,124	43,484	99.75
New Jersey	5-10	339,052	227,441	139,272	192
New Mexico	5-20	43,487	15,000	12,000	....
New York	5 21	1,884,596	1,042,160	642,948	179
North Carolina	6-21	586,668	322,533	203,100	*f* 61.67:62.50
North Dakota	7.20	43,153	35,543	21,710	99
Ohio	6-21	1,123,895	797,439	549,269	157
Oklahoma	....	....	....	....	....
Oregon	4-21	99,543	63,251	43,018	95
Pennsylvania	6-21	....	965,444	682,941	155.98
Rhode Island	5-15	64,960	*h*52,774	33,905	186
South Carolina	6-16	281,684	201,260	147,799	70
South Dakota	....	....	....	....	....
Tennessee	6-21	686,310	420,104	296,765	80
Texas	8-16	545,616	466,872	286,771	*g* 100, 164.6
Utah	6-18	60,958	33,625	19,376	145
Vermont	5-20	78,997	65,608	45,887	126
Virginia	5-21	652,045	342,269	198,290	118.4
Washington	6-21	87,813	55,964	36,946	92
West Virginia	6-21	266,326	193,064	121,700	96
Wisconsin	4-20	592,755	351,723	200,457	170
Wyoming	....	....	5,622	3,750	....
Total					

a. For 1888. *b.* Graded and ungraded schools respectively. *c.* In winter. *d.* White schools only. *e.* For 1888. *f.* For white and colored schools respectively. *g.* For rural and city schools respectively. *h.* Including evening schools. *i.* In 1888.

Massachusetts has enrolled a greater number than the school population. The four others having the highest percentage of enrollment to population, are: Texas, 85 per cent; Vermont, 83; North Dakota, 82; Florida, 83;. The four having the lowest per centage, are: New Mexico, 34 per cent; Louisiana, 39; Illinois, 45; Kentucky, 49 per cent.

EGGS. The United States produces over 500 million dozen eggs annually; Great Britain, 180; France, 360; Germany, 300; and Italy 150. Hens' eggs range from 72 to 80 per cent. of the total in the above countries. They average a little over 2 oz. in weight. The average number of eggs laid annually is 120 per hen.

ELECTORAL VOTE. The Presidential Electoral Vote of the States for 1893 will be as follows:—

Alabama	11
Arkansas	8
California	9
Colorado	4
Connecticut	6
Delaware	3
Florida	4
Georgia	13
Idaho	3
Illinois	24
Indiana	15
Iowa	13
Kansas	10
Kentucky	13
Louisiana	8
Maine	6
Maryland	8
Massachusetts	15
Michigan	14
Minnesota	9
Mississippi	9
Missouri	17
Montana	3
Nebraska	8
Nevada	3
New Hampshire	4
New Jersey	10
New York	36
North Carolina	11
North Dakota	3
Ohio	23
Oregon	4
Pennsylvania	32
Rhode Island	4
South Carolina	9
South Dakota	4
Tennessee	12
Texas	15
Vermont	4
Virginia	12
Washington	4
West Virginia	6
Wisconsin	12
Wyoming	3
Total	444

ELECTORS. The number of Electors in the principal countries enrolled per 1,000 inhabitants is: Great Britain, 88; France, 263; Germany, 202; Austria, 59; Switzerland, 242; Italy, 22; Portugal, 54; Belgium, 18. The cost of a general election in England is $3,180,000; in Scotland, $190,000; in Ireland, $350,000; in all, $3,720,000. The representation in Great Britain is: England, 75; Scotland, 9.2; Ireland, 15.8. The proportion of revenue paid is: England, 77.1; Scotland, 12.4; Ireland, 10.5; the proportion of population is: England, 74.6; Scotland, 10.7; Ireland, 14.7.

In the French Republic suffrage is practically universal, there having been inscribed on the registers of the Ministry of the Interior by an official report dated April 1, 1876, 9,948,070 legal voters, out of a population the same year of 36,905,788 in France. This gives 1 voter to every 4 inhabitants nearly. In the United States, by the census of 1880, the ratio of legal voters to population was 1 to 4 nearly. In Great Britain, where suffrage is restricted, the proportion is 1 voter to every 11 inhabitants.

ELECTRIC LIGHT. The greatest lights are: Chandelier Palais d'Industrie, Paris. 250,000 candle power; Torch, Statue of Liberty, N. Y. Harbor, 60,000; The Electric Moon. San Jose, California, 24,000 candle power; Marseilles Light house, France, 40,000; Sydney Light house, Australia, 180,000; Chandelier, Crystal Palace, London, 3,000.

One engine of 40-horse power, Brush system, feeds 400 lamps on a line of 30 miles, consuming 150 lbs. of coal per hour, as compared with one ton per hour for gaslight over the same length.

The San Jose electric moon stands on a tower 200 feet high, is worked by a 9-horse engine, and shows light for 2 miles around. The Sydney light is visible 50 miles and has an intensity equal to 12 millions of candles, being the largest light yet made. The Marseilles light gives 6 times more light than the old system, at a saving of 18 cents per hour. The Kensington Museum saves $1,175 a year by the change. The smallest lights are Swan and Edison's arc lights of 8 candle power for domestic use.

ELECTRIC MOTOR.

1873. At the Vienna Exhibition a pump was worked at a distance of 1,400 yards by means of an electric wire.

1879. At Sermaize, La Marne, a field of 6 acres was ploughed in 6 hours with a wire attached to a 12-horse engine a mile distant.

1881. At Oisiel a farmer named Meiner ploughed a large field by connecting an electric wire with a waterfall.

1882. Project to tap the force of Niagara by constructing turbines, the power of water being estimated at 10 million cubic feet per second, or 8 million horse power, and to transmit this force through the United States. Estimated value, $1,500,000 a day, or 540 million dollars annually. A copper wire, half-inch diameter and 300 miles long, would suffice to convey 30,000 horse power from Niagara to New York.

1883. Four electric locomotives constructed by the New York Railway Company to do the work of 160 ordinary locomotives.

1891. There are 113 electric roads in the U. S., and 450 others under construction, aggregating 512½ miles, (230 of which are in Boston). There are 647 motor cars including those under contract, 300 of them for Boston.

ELECTRIC SCIENCE.

(1.) The *Magasin du Louvre* at Paris finds the cost of lighting to be: Gas, 100; Edison light, 75; Jablochkoff, 55.

(2.) The first electric railway in the United Kingdom was opened from Belfast to Giant's Causeway in September, 1883.

(3.) The first electric screw-boat made a trip on the Thames at Greenwich, July, 1883; speed, 9 miles an hour.

EUROPE. Schools of See *Schools.*

ELEVATION of Continents and Lakes. The average above sea level is: Europe, 670, Asia, 1,140; North America, 1,150; South America, 1,100. The height of Lake Superior above sea level is 600 feet; Lake Michigan, 578; Lake Huron, 578; Lake Erie, 565; Lake Ontario, 243 feet.

See *Depth.*

EMERALD. The value of this gem is 5 grains, $25; 10 grains, $100; 15 grains, $250, 24 grains, $500.

EMIGRATION. See *Immigration.*

EMPLOYMENTS of the People. See Diagram, page 39.

ENTERIC Fever. See *Consumption* also *Diseases.*

ENTRIES. The entries into United States ports in 1881 were in thousand tons: American, 2,919; British, 8,458; German, 1,173; Scandinavian, 1,035; Italian, 659; French, 305; Spanish, 277; all others, 805; total, 15,631. This shows 54 per centage to have been British. The American flag stood for 12 per cent. of entries in Great Britain in 1860, and for less than 2 per cent. in 1880.

EVICTIONS. The number of persons actually evicted in Ireland from 1849–82 was over 2 millions, or about 70,000 per annum, or 35 per cent. of the population.

EXHIBITIONS.

Date.	PLACE.	Area (Acres).	Visitors (Millions).	Days Open.	Receipts.
1851	London	21	6.2	141	$2,120,000
1855	Paris	24	4.5	200	640,000
1862	London	28	6.2	171	2,040,000
1867	Paris	37	9.3	217	2,100,000
1873	Vienna	48	7.3	186	2,030,000
1876	Philadelphia	45	10.2		......
1878	Paris	60	16.1	194	4,870,000
1885	New Orleans	200	....	....	....
1889	Paris	173	2.8	183	8,870,000
1893	Chicago	1,037	....	179	....

The main building of the New Orleans Exposition was the largest ever erected, being 1,378 feet long by 905 wide. The United States and State building of 885 feet and a width of 565, Horticultural Hall was 600 feet long and 194 wide.

EXPENDITURES of Nations. See Diagram, page 23.

EXPORTS AND IMPORTS. See Diagram, page 23.

EXEMPTION Laws of the United States.

	Value of Personal Property.	Acres of Land.	Value of Homestead.		Value of Personal Property.	Acres of Land.	Value of Homestead.
Alabama	$1,000	160	$2,000	Mississippi	$550	80	$2,000
Arizona	900	.	5,000	Missouri	300	160	1,500
Arkansas	900	160	2,500	Montana	900	...	5,000
California	500	. .	5,000	Nebraska	.	160	2,000
Colorado	1,000	Any No.	2,000	Nevada	900	.	5,000
Connecticut	500	.	*	New Hampshire	About 450	. .	500
Dakota	1,500	160	*	New Jersey	200	. .	1,000
Delaware	200	...	*	New Mexico	900	...	5,000
Dist. of Columbia	300	...	*	New York	250	...	1,000
Florida	1,000 No waiver.	160		North Carolina	500	...	1,000
Georgia	300	50	......	Ohio	100	. .	1,000
Idaho	300	...	1,600	Oregon	175	...	*
Illinois	300	...	5,000	Pennsylvania	300	.	*
Indiana	600	..	1,000	Rhode Island	500	. .	.
Iowa	200	40	*	South Carolina	500	...	1,000
Kansas	800	160	No Limit.	Tennessee	1,200	. .	1,000
Kentucky	200	...	No Limit.	Texas	....	200	5,000
Louisiana	†	160	1,000	Utah	....	. .	1,000
Maine	About 300	...	†	Vermont	200	...	500
Maryland	100	...	500	Washington Ty.	‡	‡	‡
Massachusetts	About 450	...	*	West Virginia	200	. .	1,100
Michigan	400	40	800	Wisconsin	450	40	. . .
Minnesota	800	80	1,500	Wyoming	900	...	5,000
			......				

*No Homestead Law. †The homestead, land and personal property not to exceed $2,000. ‡Similar to California.

EXPECTATION of Life. See *Life.*

FACTORY Steam Power of Nations. See Diagram, page 39.

FAILURES. See *Bankruptcy.*

FAIRS. In that of Leipzig the annual average of sales is 20 million dollars comprising 20,000 tons of merchandise, of which 8,000 tons are books.

The fair of Nijni-Novgorod is the greatest in the world, the returns showing:

Year.	Goods Offered.	Goods Sold.
1841	$ 40,000,000	$35,000,000
1857	65,000,000	60,000,000
1876	150,000,000	140,000,000

This fair is attended by 150,000 dealers from all parts of the world, and the goods sold in 1876 were, in million dollars: Cottons, Linens, etc., 40; Furs, Leather, etc., 35; Ural Metals, 35; Flour, Fish, Brandy, 15; Tea and Luxuries, 15.

FAMILIES. See *Dwellings.*

FAMINES.

Walford mentions 150 since the eleventh century, viz.:—

England	57	France	10
Ireland	34	Germany	11
Scotland	12	Italy, etc.	36

The worst in modern times have been:—

Country.	Date.	No. of Victims.
France	1770	48,000
Ireland	1847	1,029,000
India	1866	1,450,000

FARMS. In the United States (1880) there were 4,008,907 farms, comprising 284,771,042 acres, valued at $10,197,096,776; value of farm implements, $406,520,055; Live Stock, $1,500,464,609; cost of fences, etc., $77,763,473; annual cost of fertilizers, $28,586,397; estimated value of all productions, $2,213,402,564.

See *Agriculture.*

FARM ANIMALS. See *Live Stock*, also Diagram, page 43.

FAST TIME. Tables showing the record of best performances on the American Turf to July, 1891.

TROTTING.

IN HARNESS.

*1 mile by a mare—Maud S., at Glenville, O., July 30, 1885 .... 2.08¾
*1 mile by a gelding—Jay-Eye-See, at Narragansett, R. I., August 1, 1884 .... 2.10¼
*1 mile by a stallion—Nelson, at Cambridge, Ind., October 22, 1890 .... 2.10¾
1 mile on a ½-mile track—Rarus, at Toledo, O., and East Saginaw, Mich., in 1878 .... 2.16
1 mile to a wagon—Hopeful, at Chicago, October. 12, 1878 .... 2.16½
1 mile under saddle—Great Eastern, at New York, September 22, 1877 .... 2.15¾
1 mile in a race—Maud S., at Chicago, July 24, 1880 .... 2.13½
2 miles—Fannie Witherspoon, at Chicago, September 15, 1885 .... 4.43
3 miles—Huntress, at Prospect Park, Brooklyn, September 21, 1872 .... 7.21¼
5 miles—Lady Mack, at Oakland, Cal., April 2, 1874 .... 13.00
10 miles—Controller, San Francisco, 23, 1878 .... 27.23¼

PACING.

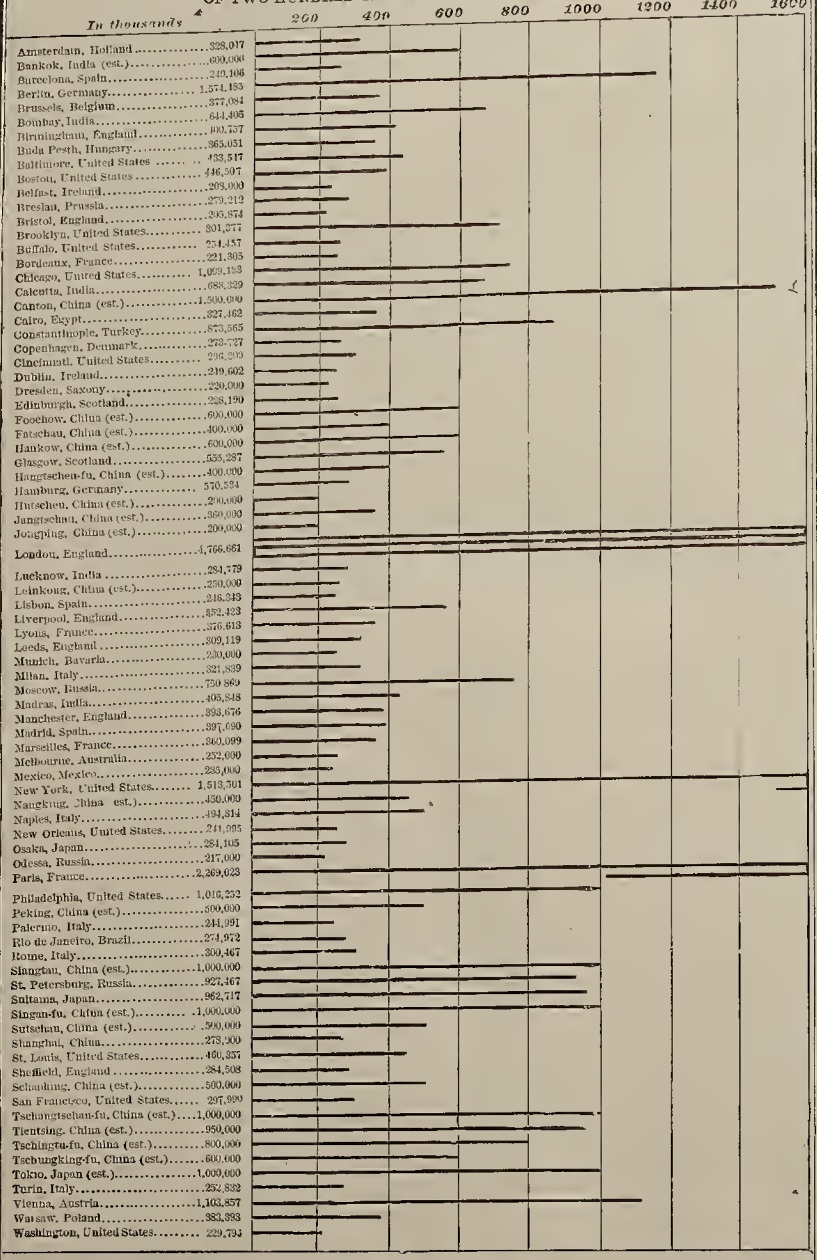
2.01¾
*1 mile—Westmont, with running mate at Chicago, Ill., July 10, 1884 .... 2.06¼
*1 mile—Johnson, harness at Chicago, Ill., October 3, 1884 .... 2.08¼
*1 mile—Roy Wilkes, stallion, at Independence, Ind., August 30, 1890 .... 2.09¼ 2.12¾ 2.13
1 mile—Hal Pointer, best three heats, at Terre Haute, Ind., October 9, 1890 .... 2.11½
1 mile—Adonis, race between horses, at Glenville, O., July 30, 1890 .... 4.56½
2 miles—Hero, harness, at Union Course, L. I., May 17, 1853 .... 7.11
3 miles—Oneida Chief, saddle, at Hoboken N. J., August 15, 1843 ....

RUNNING

.21½
¼ mile—Jim Miller, 2 years, at Deer Lodge, Montana, August 16, 1888 .... .34½
⅜ mile—Cyclone, at Helena, Montana, August 28 1889 .... .46
½ mile—Geraldine, 4 years, at Westchester, N. Y., August 30, 1889 .... .59
⅝ mile—Britannic, 5 years, at Westchester, N. Y., August 31, 1889 .... 1.10¼
¾ mile—Fides, 4 years, at Westchester, N. Y., May 31, 1890 .... 1.23½
⅞ mile—Bella B, 5 years, at Monmouth Park, N. J., July 8, 1890 .... 1.26 2-5
⅞ mile—Britannic, 5 years, at Sheepshead Bay, L. I., September 5, 1889 .... 1.35½
1 mile—Salvator, 4 years, at Monmouth Park, N. J., August 23, 1890 .... 1.39¼
1 mile—Racine, 3 years, at Monmouth Park, N. J., July 31, 1890 .... 1.46½
1 1-16 miles—Prince Royal, 5 years, at Westchester, N. Y., June 11, 1890 .... 1.52¾
1⅛ miles—Tenny, 4 years, at Chicago, Ill., June 28, 1890 .... 2.00 1-5
1 3-16 miles—Tristan, 4 years, at Sheepshead Bay, L. I., September 4, 1890 .... 2.03¼
1¼ miles—Banquet, 3 years, at Monmouth Park, N. J., July 17, 1890 .... 2.10¼
1 mile 500 yards—Bend Or, at Saratoga, N. Y., July 25, 1882 .... 2.20¼
1⅜ miles—Ormie, 4 years, at Chicago, Ill., July 7, 1890 .... 2.33
1½ miles—Firenzi, 6 years, at Sheepshead Bay, L. I., June 26, 1890 .... 2.38
2⅛ miles—Hindoocraft, 3 years, at Westchester, N. Y., August 27, 1889 ....

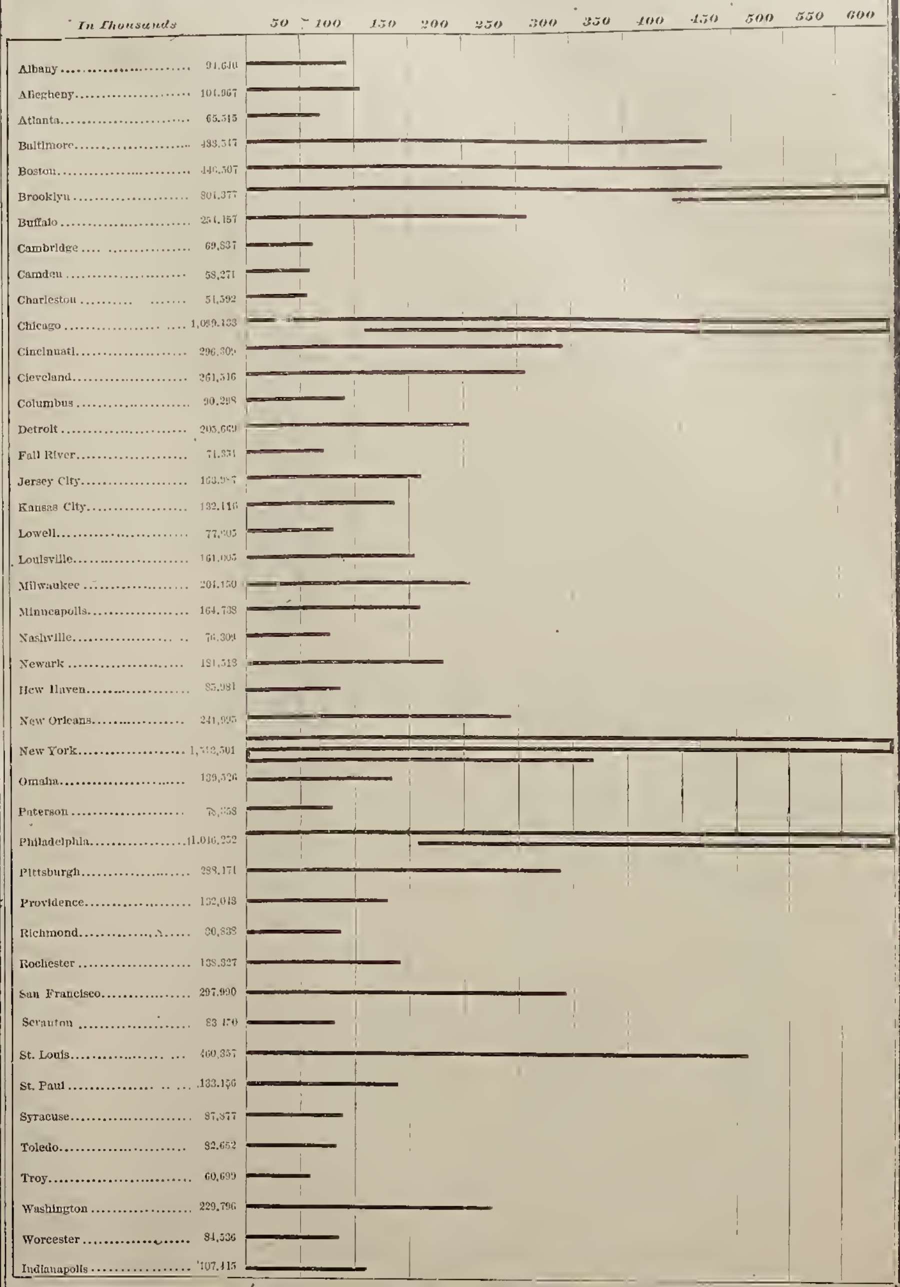
POPULATION OF CITIES OF THE WORLD.

OF TWO HUNDRED THOUSAND AND OVER.



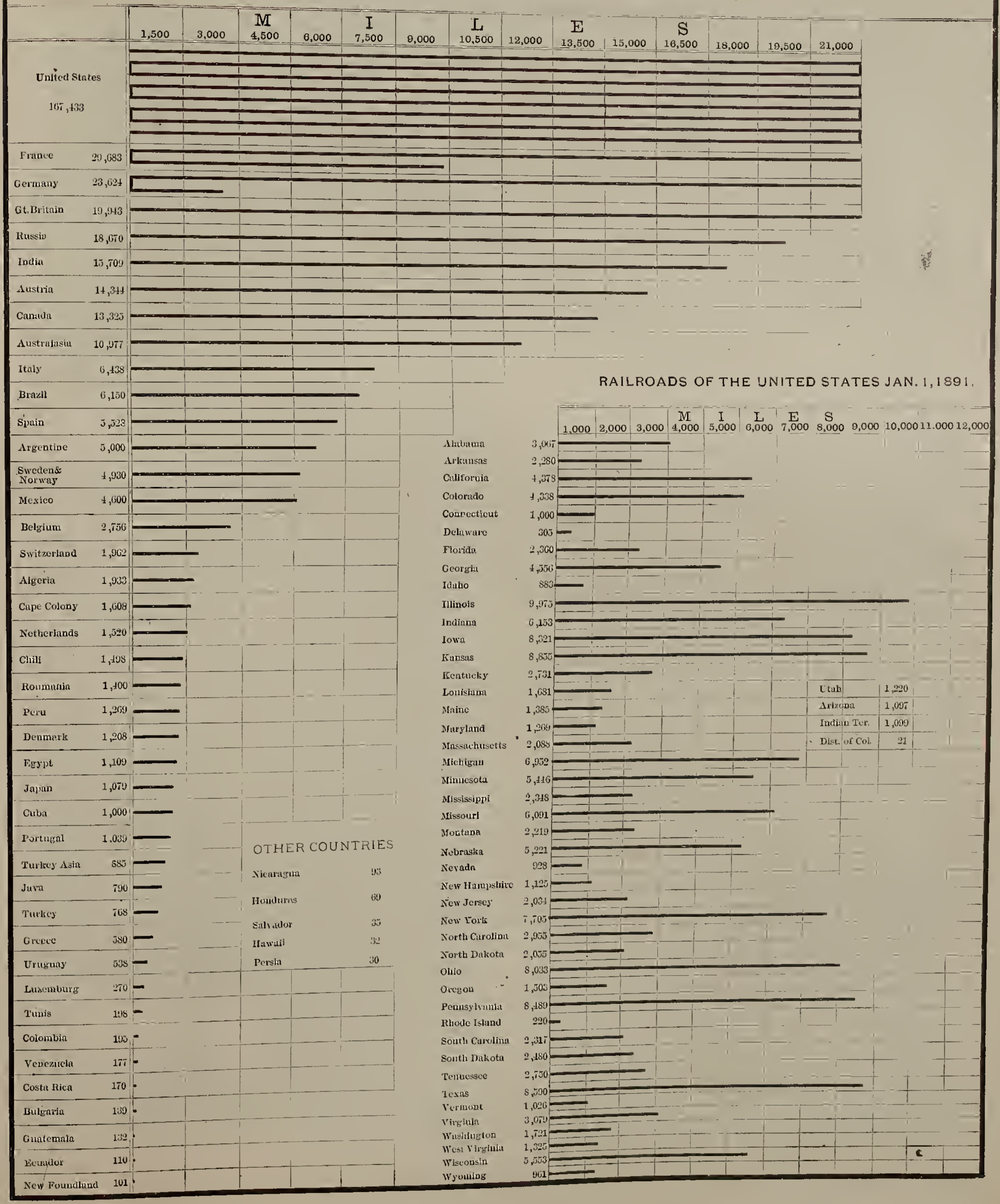
In thousands	
Amsterdam, Holland	328,017
Bankok, India (est.)	600,000
Barcelona, Spain	249,106
Berlin, Germany	1,574,485
Brussels, Belgium	377,084
Bombay, India	644,405
Birmingham, England	400,757
Buda Pesth, Hungary	365,051
Baltimore, United States	433,517
Boston, United States	446,507
Belfast, Ireland	208,000
Breslau, Prussia	279,212
Bristol, England	205,874
Brooklyn, United States	801,377
Buffalo, United States	254,457
Bordeaux, France	221,305
Chicago, United States	1,099,133
Calcutta, India	688,329
Canton, China (est.)	1,500,000
Cairo, Egypt	327,462
Constantinople, Turkey	873,565
Copenhagen, Denmark	273,727
Cincinnati, United States	296,309
Dublin, Ireland	219,602
Dresden, Saxony	220,000
Edinburgh, Scotland	228,190
Foochow, China (est.)	600,000
Fatschau, China (est.)	400,000
Hankow, China (est.)	600,000
Glasgow, Scotland	555,287
Hangtschen-fu, China (est.)	400,000
Hamburg, Germany	570,534
Hutschen, China (est.)	200,000
Jangtschau, China (est.)	360,000
Jongping, China (est.)	200,000
London, England	4,766,661
Lucknow, India	284,779
Leinkoug, China (est.)	250,000
Lisbon, Spain	216,343
Liverpool, England	552,423
Lyons, France	376,613
Leeds, England	309,119
Munich, Bavaria	230,000
Milan, Italy	321,839
Moscow, Russia	750 869
Madras, India	405,848
Manchester, England	393,676
Madrid, Spain	397,690
Marseilles, France	360,099
Melbourne, Australia	252,000
Mexico, Mexico	235,000
New York, United States	1,513,501
Naugking, China (est.)	450,000
Naples, Italy	494,314
New Orleans, United States	241,995
Osaka, Japan	284,105
Odessa, Russia	217,000
Paris, France	2,269,023
Philadelphia, United States	1,016,252
Peking, China (est.)	500,000
Palermo, Italy	244,991
Rio de Janeiro, Brazil	274,972
Rome, Italy	300,467
Siangtau, China (est.)	1,000,000
St. Petersburg, Russia	927,467
Suitama, Japan	962,717
Singan-fu, China (est.)	1,000,000
Sutschau, China (est.)	500,000
Shanghai, China	273,000
St. Louis, United States	460,357
Sheffield, England	284,508
Schauhing, China (est.)	500,000
San Francisco, United States	297,990
Tschangtschau-fu, China (est.)	1,000,000
Tientsing, China (est.)	950,000
Tschingtu-fu, China (est.)	800,000
Tschungking-fu, China (est.)	600,000
Tokio, Japan (est.)	1,000,000
Turin, Italy	252,832
Vienna, Austria	1,103,857
Warsaw, Poland	383,393
Washington, United States	229,795

POPULATION OF THE PRINCIPAL CITIES OF THE UNITED STATES



In Thousands	
Albany	94,640
Allegheny	104,967
Atlanta	65,515
Baltimore	433,547
Boston	446,507
Brooklyn	801,377
Buffalo	254,457
Cambridge	69,837
Camden	58,271
Charleston	54,592
Chicago	1,099,133
Cincinnati	296,309
Cleveland	261,546
Columbus	90,398
Detroit	205,669
Fall River	74,351
Jersey City	163,987
Kansas City	132,416
Lowell	77,605
Louisville	161,005
Milwaukee	204,150
Minneapolis	164,738
Nashville	76,309
Newark	181,518
New Haven	85,981
New Orleans	241,995
New York	1,513,501
Omaha	139,526
Paterson	78,358
Philadelphia	1,046,252
Pittsburgh	238,171
Providence	132,043
Richmond	80,838
Rochester	138,327
San Francisco	297,990
Scranton	83 470
St. Louis	460,357
St. Paul	133,156
Syracuse	87,877
Toledo	82,652
Troy	60,699
Washington	229,796
Worcester	84,536
Indianapolis	107,445

RAILROADS OF THE WORLD JAN. 1, 1891.



FAST TIME. Running Races continued:—

2 ......Ten Broeck (5), 110 lbs., Louisville, Ky., May 29, 1877 ...... 3.27½
Wild Moore (6), —— lbs., Kansas City, Mo., September 29, 1882 ...... 3.28
Cushwacker (aged), 99 lbs., Saratoga, N. Y., August 18, 1881 ...... 3.30
2⅛ ......Monitor (4), 110 lbs., Baltimore, Md., October 20, 1880 ...... 3.44½
2¼ ......{ Springbok (5), 114 lbs. / Preakness (aged) 114 lbs. } Saratoga, N. Y., July 29, 1875 ...... 3.56¼
2½ ......Aristides (4), 104 lbs., Lexington, Ky., May 13, 1876 ...... 4.27½
2⅝ ......Ten Broeck (4), 104 lbs., Lexington, Ky., September 16, 1876 ...... 4.58½
2¾ ......Hubbard (4), 107 lbs., Saratoga, N. Y., August 9, 1873 ...... 4.58¾
3 ......Drake Carter (4), 115 lbs., Sheepshead Bay, N. Y., September 6, 1884 ...... 5.24
4 ......Ten Broeck (4), 104 lbs., Louisville, Ky., September 27, 1876 ...... 7.15¾
Fellowcraft (4), 108 lbs., Saratoga, N. Y., August 20, 1874 ...... 7.19½

HEAT—BEST TWO IN THREE.

¼ ......Sleepy Dick —— lbs., Kiowa, Kansas, November 24, 1888 ...... 0.21½ 0.22¼
½ ......Rogers 113 lbs., Helena, Montana, August 22, 1888 ...... 0.48 0.48
½ ......3 in 5. Fusilade (aged), Cheyenne, W. T., June 30, 1881 ...... 0.50¾ 0.51¼ 0.52
Pequest won first heat in 0.50½.
⅝ ......Kittie Pease, 4 years, Dallas, Texas, November 2, 1887 ...... 1.00 1.00
¾ ......Lizzie S. (5), 118 lbs., Louisville, Ky., September 28, 1883 ...... 1.13¼ 1.12¾
⅞ ......Edwin A. (aged), 101 lbs., Brighton Beach, N. Y., August 28, 1882 ...... 1.34 1.37
1 ......Bounce (4) 90 lbs., Sheepshead Bay, N. Y., September 7, 1881 ...... 1.42 1.42½
1 ......3 in 5, L'Argentine (6), 115 lbs., St. Louis, Mo., June 14, 1879 ......1, 4, 3, 1.44 1.47¾
Mary Anderson, 83 lbs., won first heat in 2.09
1½ ......Bigwroon 4 years, Lockport, N. Y., July 4, 1872 ...... 2.42¼ 2.43
2 ......Miss Woodford (4), 107½ lbs., Sheepshead Bay, N. Y., September 20, 1884 ...... 3 33 3.31¼
3 ......Norfolk (4), 100 lbs., Sacramento, Cal., September 23, 1865 ...... 5.27½ 5.29
4 ......Ferida (4), 105 lbs., Sheepshead Bay, N. Y., September 18, 1880 ...... 7.23½ 7.11

HURDLE RACES.

1 ......Bob Thomas 140 lbs., Chicago, Ill., August 13, 1890 ...... 1.49
1 ......Swannanoe (aged), 120 lbs. Brighton Beach, N. Y., July 16, 1881 ...... 1.50
1⅛ ......Winslow 138 lbs., Chicago, Ill., August 29, 1888 ...... 2.02¾
1¼ ......Jim McGown (4), 127 lbs., Brighton Beach, N. Y., November 9, 1882 ...... 2.16
1⅜ ......Guy 155 lbs., Latonia, Ky., October 8, 1885 ...... 2 35
1½ ......Kitty Clark (4), 130 lbs, Brighton Beach, August 23, 1881 ...... 2.47
Speculation (6), 125 lbs, Brighton Beach, N. Y., July 19, 1881 ...... 2.47
1⅝ ......Turfman (5), 140 lbs., Saratoga, N. Y., August 7, 1882 ...... 3.16
1¾ ......Kitty Clark (4), 142 lbs., Monmouth Park, N. J., July 12, 1882 ...... 3.17
2 ......Tom Leathers (aged), 117 lbs., New Orleans, La., April 16, 1875 ...... 3.47½
1¼ ......Cariboo (5), 154 lbs., Monmouth Park, N. J., August 28, 1875 ...... 4.33
Mile Heats—Joe Rhodes (5), 140 lbs., St. Louis, Mo., June 4, 1878 ...... 1.50¾ 1.50¼

HAVE TROTTED FASTER THAN 2.20.

HORSE AND SIRE.	Record.	No. of Heats.
Maud S., ch. m., by Harold	2.08¾	29
Jay-Eye-See, blk. g., by Dictator	2.10	21
St. Julien, b. g., by Volunteer	2 11¼	44
Maxey Cobb, b. h., by Happy Medium	2.13¼	5
Rarus, b. g., by Conklin's Abdallah	2.13¼	67
Phallas, b. h., by Dictator	2 13¾	25
Clingstone, b. g., by Rysdyk	2 14	18
Goldsmith Maid, b. m., by Alexander's Abdallah	2 14	114
Trinket, b. m., by Princess	2.14	29
Hopeful, gr. g., by Godfrey's Patchen	2.14¾	50
Harry Wilkes, b. g., by George Wilkes	2.14¾	74
Lula, b. m., by Alexander's Norman	2.15	20
Majolica, b. g., by Startle	2.15	9

FASTEST ATLANTIC OCEAN PASSAGES.

	Steamers.	Line.	Date Arrived.	D.	H.	M.
Queenstown to New York	Teutonic	White Star	August 13, 1890	5.	19.	5
Roche's Point to Sandy Hook	City of Paris	Inman	August 28, 1889	5.	19.	18
Roche's Point to Sandy Hook	Etruria	Cunard	September 7, 1889	6.	1.	50
Kinsale to Sandy Hook	America	National	June 4, 1884	6.	15.	41
Roche's Point to Sandy Hook	Alaska	Guion	October 7, 1888	6.	20.	23
New York to Queenstown	Umbria	Cunard	November 18, 1888	6.	3.	4
Sandy Hook to Kinsale	America	National	June 18, 1884	6.	18.	44
Sandy Hook to Roche's Point	Alaska	Guion	September 19, 1882	6.	18.	37
Sandy Hook to Roche's Point	Germanic	White Star	February 14, 1889	7.	9.	0
Sandy Hook to Roche's Point	City of Berlin	Inman	October 10, 1875	7.	15.	40

The best Steamboat records are as follows: The *Mary Powell*, from New York to Poughkeepsie, 76 miles, in 3 hours and 23 minutes. The *South America*, 26 miles on the Hudson in 1 hour. 125, in 5 h. 18 m., by *Chrysopolis*. Sacramento to San Francisco. From New Orleans to St. Louis the *R. E. Lee*, June 30, July 4, 1870, 3 days, 18 hours, 14 minutes.

RAILROADING.

1 mile—50¼s., 3 miles in 2m. 36¼s., 5 miles in 4m. 50s., West Philadelphia to Jersey City, Sept. 4, 1879.
10 miles—8m., Hamburg to Buffalo, N. Y.; in 9m., Peekskill to Sing Sing, N. Y., Feb. 17, 1874.
14 miles—11 m., locomotive Hamilton Davis and six cars, N. Y. Central R. R., 1855.
18 miles—15 m., special train conveying the Duke of Wellington, Paddington to Slough, Eng.
44 miles—43 m. 30 s., special train conveying newspaper correspondents, last 16¾ miles in 14 m., Washington Junction to Washington, D. C., June 10, 1881.
53¼ miles—47 m., broad guage engine Great Britain, 4 carriages and vans, Paddington to Didcot, Eng., May 11, 1848.
111 miles—98 m., Fontaine engine and two coaches, Amherstburg to St. Thomas, Canada, May 5, 1881. 109 m., locomotive, baggage car, one coach, and one Pullman palace car, St. Thomas to Amherstburg, Sept. 13, 1877.
118 miles—120 m., Engine No. 10, special palace car, 17 m. (Welland to Victoria), in 14½ m., St. Thomas to Victoria, Canada, 153 m., Fontaine engine and two coaches, in 251 m., St. Thomas to Victoria, May 5. 1881. The schedule time from London to Bristol, Eng., 118½ m., by the train known as the "Flying Dutchman," in 120 m.
[illegible] miles—165 m., special train, Niagara Falls to Syracuse, N. Y., March 1, 1876.
813 miles—23 h. (actual running time, 19 h. 30 m.), special train conveying the Washington newspaper correspondents from convention, Chicago, Ill., to Washington, D. C., June 7-8, 1884.
Jersey City to San Francisco, Cal., 83 h. 39 m. 16 s., Jarrett & Palmer's train, combination passenger, mail and baggage car and a Pullman hotel car, June 1 to 4, 1876. No stops between Jersey City and Pittsburg, Pa.

YACHT SAILING.

40 miles—3 h. 55 m. 40 s., Montauk, 20 miles to windward from Brenton's Reef light and return.
Irish Coast to Sandy Hook, U. S., English schooner Cambria against N. Y. Dauntless, 2,861 miles, sailed 2.20 P. M., July 4, arrived 4.47 P. M., July 27, 1870. See America's Cup.

FATS. Fat is composed of two substances, Oleine, or Elain, which is that portion of all fats which always retains its fluid state, and may be obtained from them by pressure; and Stearine, which is the solid portion that remains after the Oleine is removed. The composition of 100 parts of different varieties of fats, and the temperature at which they melt are:—

	Oleine.	Stearine.	Fusible Temperature.		Oleine.	Stearine.	Fusible Temperature.
Fresh Butter in sum'er	60	40		Mutton suet	23	77	97° to 104° Fahr.
" " " winter	37	63		Goose fat	68	32	111° Fahr.
Hog's Lard	62	38	97° Fahr.	Duck "	72	28	126½° Fahr.
Ox Marrow	24	76		Turkey fat	74	26	113° "
Ox Tallow	24	76		Fat of Meat			127° "

Professor Johnston says that the solid fat of the goose is the same as that of man, and as that in olive oil and butter, and is named *margarine;* and that the solid fat of cattle, the sheep, the horse, the pig, differs from that of man, and is known by the name of stearine. The fluid part, or oleine, is identical in all animals and is exactly the same thing as the fluid part of olive oil, and many other vegetable oils, and in greater quantities in the fat of some animals than in that of others.

FECUNDITY and Life Period of Birds.

	Years.		Years.		Eggs at a sitting.
Blackbird	10 to 12	Peacock	24	Eagle	2 to 3
Blackcap	15	Pelican	40 to 50	Falcon	2 to 4
Canary, if it does not couple,	24	Pheasant	15	Fowl, domestic	6 to 20
Chaffinch	20 to 24	Partridge	15	Hawk	2 to 4
Crane	24	Pigeon	20	Owl	2 to 6
Crow	100	Raven	100	Partridge	14 to 20
Eagle	100	Robin	10 to 12	Pheasant	10 to 20
Fowl, common	10	Skylark	10 to 30	Sparrow	4 to 6
Goldfinch	10 to 15	Sparrow Hawk	40	Sparrow Hawk	2 to 5
Goose	50	Starling	10 to 12	Stork	2 to 3
Heron	60	Swan	100	Swallow	5 to 6
Lark	16 to 18	Thrush	8 to 10	Wren	10 to 16
Linnet	14 to 23	Titlark	5 to 6		
Nightingale	16 to 18	Wheatear	2		
Parrot	10	Wren	2 to 3		

FEEBLE MINDED. See *Schools.*

FEVER. The predisposition varies with age in the following degree:—

Age.	Degree.	Age.	Degree.	Age.	Degree.
Under 5.	10	20-25	197	50 55	6
5-10	94	25-30	102	Over 55.	2
10-15	182	30-40	44		
15-20	269	40-50	16		

Napoleon lost 51,000 soldiers by fever in his campaign of 1812, and the French army 17,000 men in the Crimea, in 1855. The visitation of typhus fever in Great Britain in 1846-7 attacked 1,400,000 persons, of whom 10,000 died in Liverpool alone. In 1798 yellow fever ravaged the cities of Baltimore, Philadelphia and New York. 50,000 of the 70,000 people in Philadelphia fled from the city. In 1878 the yellow fever raged in southern towns of the United States, and was especially fatal at Memphis.

See *Diseases.*

FINANCES of Nations. The following table gives the Debts, Revenues, Expenditures and Commerce of the principal nations compiled from official documents:

COUNTRIES.	Fisc'l Year.	Public Debt.	Revenue.	Expenditures.	Imports.*a*	Exports.*a*
		Dollars.	Dollars.	Dollars.	Dollars.	Dollars.
Argentine Republic	1884	128,047,253	39,236,749	36,694,490	81,246,163	60,389,052
Australasia *b.*	1884	614,613,315	111,427,055	103 295,230	321,762,550	221,680,635
Austria-Hungary	1883	1,100,370,800	50,223,404	52 648,970	249,960,000	299 960,000
Austria proper	1884	273,116,953	237,277,845	257,459,685	(In Austria-	Hungary.)
Hungary proper	1883	582,250,000	150,443,209	164,460,012	(In Austria-	Hungary.)
Belgium	1884	408,992,466	63,227,830	65,374,150	314 239 840	250,643,580
Brazil	1884	431,584,400	66,524,700	75,727,168	90,354,860	108,354,900
Canada	1884	255,966,417	35,794,650	28 730,157	116,397,043	91,406,496
Egypt	1882	518,625,840	47,016,450	49,613,705	41 820 000	73,397,000
France	1885	5,950,000,000	757,361,000	763,849,240	905,180,000	650,920,000
Germany	1884	140,748,500	141,741,303	116,562,940	882,125,000	814,501,000
German States	1883	1,590,580,000	561,615,232	432,653,115	(In German	Empire.)
Great Britain	1885	3,701,653,270	439,940,550	445,189,415	1,950 092 845	1,479,837 915
Greece	1884	90,496,660	14,265,000	18,060,000	27,265 840	18 864,920
India, British	1882	806,501,105	358 637,105	351,699,625	340,783 265	445,492,135
Italy	1884	2,201,903,485	273,598,180	278,920,120	270,368 950	219,684,450
Japan	1881	250,319,175	75,616,059	75,606,059	28,821 824	33,016 248
Mexico	1884	153 790,000	25,425,000	24,072,000	30 271,000	46,725,496
Netherlands	1884	432 491,640	41 503,747	55 714,547	394,560 890	258,469,840
Norway	1884	29,791,240	14,138,640	12,407,725	52,648,295	16,369,480
Peru	1879	241,150,000	66,601,664	68,000,000	11,064,744	7,958,625
Portugal	1884	532,314,570	32,114,659	33,465,449	39 269,640	29,293,200
Roumania	1884	149,063,773	29,371,914	27,111,570	71,981,435	44,130,056
Russia	1884	2,601,345,000	349,495,000	361,845,000	288,421,640	351,264,980
Servia	1884	40,250,695	7,473,000	7,458,232	10,217,260	7,750,000
Spain *c*	1881	1,278,126,500	160,475,375	183,946,000	178,589,202	143,893 683
Sweden *d*	1884	63 946,050	27,873,000	25,509,250	63,840,000	70,524,000
Switzerland *e*	1884	6,120,780	9 025,600	9,085,600	Not given.	Not given.
Turkey *f*	1885	744 839,018	59,221,200	76,662,148	87,272,845	58,272,475
United States	1885	1,863,964,873	323,690,706	305,830,970	620,769,652	784,406,414
Total debts	....	27,183,523,780				

a Including merchandise, specie and bullion.

b Including New South Wales, New Zealand, Queensland, South Australia, Tasmania, Victoria, an Western Australia.

d. Spain being wholly unable to meet the interest on its debt, it was "converted" in 1881-82 from an aggregate of $2,560,000,000. into new securities to the amount of $1,290,000,000 at 4 per cent.

e Debt of Sweden is wholly offset by the value of the State railways, built by the Government.

f. Switzerland makes no reports of her external commerce by money values, but only by weigh merchandise.

g. The Turkish Government, by arrangement with a committee of bondholders, "scaled" its pub debt in 1881, from $1,264,009,425 to $532,186,170, pledging its revenues for payment.

FIBRE. See *Cotton, Flax, Hemp* and *Jute.*

FINANCES. See Diagrams on pages 22, 23, 31 and 38.

FINANCIAL History of the United States. The following table gives a complete exhibit of the Public Debt, Gross Revenues, Expenditures, Exports and Imports for every year from 1789 to the present time:—

Year.	President.	Public Debt.	Revenues.	Expenditures	Exports.	Imports.
1780	George Washington	......	......	......	......	......
1790	George Washington	......	......	......	20,205,156	23,000,000
1791	George Washington	75,463,476	10,210,025	7,207,539	19,012,041	29,200,000
1792	George Washington	77,227,924	8,740,766	9,141,569	20,753,098	31,500,000
1793	George Washington	80,352,634	5,720,624	7,529,575	26,109,572	31,000,000
1794	George Washington	78,427,404	10,041,101	9,302,124	33,026,233	34,000,000
1795	George Washington	80,747,587	9,419,802	10,435,069	47,989,472	69,756,268
1796	George Washington	83,762,172	8,740,329	8,367,776	67,064,097	81,436,164
1797	John Adams	82,064,479	8,758,916	8,626,012	56,850,206	75,379,406
1798	John Adams	79,228,529	8,209,070	8,613,517	61,527,097	68,551,700
1799	John Adams	78,408,669	12,621,459	11,077,043	78,665,522	79,089,148
1800	John Adams	82,976,294	12,451,184	11,989,739	70,970,780	91,252,768
1801	T. Jefferson	83,038,050	12,945,455	12,273,376	91,115,925	111,363,513
1802	T. Jefferson	80,712,632	15,001,391	13,276,084	72,483,160	76,333,566
1803	T. Jefferson	77,054,686	11,064,097	11,258,983	55,800,033	64,666,613
1804	T. Jefferson	86,427,120	11,835,840	12,624,646	77,699,074	185,000,000
1805	T. Jefferson	82,312,150	13,689,508	13,727,124	95,566,021	120,600,000
1806	T. Jefferson	75,725,270	15,608,828	15,070,093	101,536,963	120,110,000
1807	T. Jefferson	69,218,398	16,398,019	11,292,292	108,343,151	138,500,000
1808	T. Jefferson	65,196,317	17,065,544	16,764,584	22,430,900	56,990,000
1809	J. Madison	57,023,192	7,773,473	13,867,226	52,203,233	59,400,000
1810	J. Madison	53,173,217	12,144,206	13,319,986	66,657,970	85,406,000
1811	J. Madison	48,005,587	14,431,838	13,601,808	61,316,833	53,400,000
1812	J. Madison	45,209,737	12,639,032	22,279,121	38,527,236	77,030,000
1813	J. Madison	55,962,827	40,524,844	39,190,520	27,855,997	22,005,000
1814	J. Madison	81,487,846	34,559,536	38,028,230	6,927,441	12,965,007
1815	J. Madison	99,833,660	50,961,237	39,582,493	52,557,753	113,041,200
1816	J. Madison	127,334,933	57,171,421	48,244,495	81,920,452	147,103,040
1817	J. Monroe	123,491,965	33,833,592	40,877,646	87,671,560	99,250,000
1818	J. Monroe	103,466,633	21,593,936	35,104,875	93,281,133	121,750,000
1819	J. Monroe	95,529,648	24,605,665	24,004,199	70,141,501	87,125,000
1820	J. Monroe	91,015,566	20,881,493	21,763,024	69,691,669	74,450,000
1821	J. Monroe	89,987,427	19,573,703	19,090,572	69,974,382	62,585,724
1822	J. Monroe	93,546,676	20,232,427	17,676,592	73,160,281	83,241,541
1823	J. Monroe	90,875,877	20,540,666	15,314,171	74,699,030	77,579,267
1824	J. Monroe	90,269,777	24,381,212	31,898,538	75,986,657	89,549,007
1825	J. Q. Adams	83,788,432	26,840,858	23,585,804	99,535,388	96,340,075
1826	J. Q. Adams	81,054,059	25,260,434	24,103,398	77,595,322	84,974,477
1827	J. Q. Adams	73,987,357	22,966,363	22,656,764	82,324,727	79,484,068
1828	J. Q. Adams	67,475,043	24,763,629	25,459,479	72,264,686	88,509,824
1829	A. Jackson	58,421,413	24,827,627	25,044,358	72,358,671	74,492,527
1830	A. Jackson	48,565,406	24,844,116	24,585,281	73,849,508	70,876,920
1831	A. Jackson	39,123,191	28,526,820	30,038,446	81,310,583	103,191,124
1832	A. Jackson	24,322,235	31,865,561	34,356,698	87,176,943	101,029,266
1833	A. Jackson	7,001,032	33,948,426	24,257,298	90,140,443	108,118,311
1834	A. Jackson	4,760,081	21,791,935	24,601,982	104,336,973	126,521,332
1835	A. Jackson	37,733	35,430,087	17,573,141	121,693,577	149,895,742
1836	A. Jackson	37,513	50,826,796	30,868,164	128,663,040	189,980,035
1837	M. Van Buren	336,957	27,883,853	37,265,037	117,419,376	140,989,217
1838	M. Van Buren	3,308,124	39,019,382	39,455,437	108,486,616	113,717,404
1839	M. Van Buren	10,434,221	33,881,242	37,614,936	121,028,416	162,092,132
1840	M. Van Buren	3,573,343	25,032,193	28,226,533	132,085,936	107,641,519
1841	W. Harrison	5,250,876	30,519,474	31,797,530	121,851,803	127,946,177
1842	J. Tyler	13,594,481	34,773,744	32,936,876	104,691,531	100,152,087
1843	J. Tyler	32,742,922	20,782,410	12,118,105	84,346,480	64,753,799
1844	J. Tyler	23,461,652	31,198,555	33,642,110	111,200,046	108,435,035
1845	J. K. Polk	15,925,303	29,941,853	30,490,408	114,646,606	117,254,564
1846	J. K. Polk	15,550,203	29,699,967	27,632,282	113,488,516	121,691,797
1847	J. K. Polk	38,826,535	55,338,168	60,520,851	158,648,622	146,545,638
1848	J. K. Polk	47,044,822	56,992,479	60,655,143	154,032,131	154,998,928
1849	Z. Taylor	63,061,858	59,796,892	56,386,422	145,755,820	147,857,439
1850	M. Filmore	63,452,774	47,649,388	44,604,718	151,898,720	178,138,318
1851	M. Filmore	68,304,796	52,762,704	48,476,104	218,388,011	216,224,932
1852	M. Filmore	66,199,342	49,893,115	46,712,608	207,638,366	212,945,442
1853	F. Pierce	59,803,108	61,500,102	54,577,061	230,976,157	267,978,647
1854	F. Pierce	42,242,222	73,802,291	75,473,119	278,241,064	304,562,381
1855	F. Pierce	35,586,957	65,351,374	66,164,775	275,156,816	261,468,520
1856	F. Pierce	31,972,537	74,056,899	73,185,644	326,964,908	314,639,942
1857	J. Buchanan	28,699,831	68,969,212	71,071,713	362,960,068	360,890,141
1858	J. Buchanan	44,911,881	70,372,665	81,690,521	324,644,421	282,613,150
1859	J. Buchanan	58,496,837	81,758,557	83,756,020	356,789,461	338,768,130
1860	J. Buchanan	64,842,287	76,841,407	76,984,848	400,122,296	362,166,254
1861	A. Lincoln	90,580,873	83,371,640	85,283,744	243,971,277	335,650,153
1862	A. Lincoln	524,176,412	581,679,915	570,859,141	210,688,675	205,771,729
1863	A. Lincoln	1,119,772,138	889,379,652	895,822,860	241,977,474	252,919,920
1864	A. Lincoln	1,815,784,370	1,392,500,716	1,295,894,656	243,977,589	329,562,895
1865	A. Lincoln	2,680,647,869	1,805,939,345	1,907,171,368	201,558,372	248,555,652
1866	A. Johnson	2,773,236,173	1,270,884,173	1,141,072,776	420,161,476	445,512,158
1867	A. Johnson	2,678,126,103	1,131,060,920	1,093,070,655	438,577,312	417,833,575
1868	A. Johnson	2,616,878,511	1,030,749,516	1,270,884,173	451,301,713	371,624,808
1869	U. S. Grant	2,588,452,213	609,621,828	584,777,996	413,961,115	437,314,255
1870	U. S. Grant	2,480,672,427	696,729,973	702,907,842	499,092,143	462,377,587
1871	U. S. Grant	2,253,211,332	652,092,468	691,680,858	562,518,651	541,493,708
1872	U. S. Grant	2,153,251,328	679,153,921	682,525,270	549,219,718	640,338,766
1873	U. S. Grant	2,234,482,933	548,669,221	524,044,597	647,088,496	663,617,147
1874	U. S. Grant	2,251,690,648	728,751,291	709,198,933	654,913,445	595,861,248
1875	U. S. Grant	2,232,284,531	675,971,607	682,000,885	605,574,853	553,906,153
1876	U. S. Grant	2,180,395,066	684,937,847	707,805,070	596,890,953	476,677,871
1877	R. B. Hayes	2,205,301,392	617,872,335	562,625,432	658,637,457	492,097,540
1878	R. B. Hayes	2,256,205,982	662,345,080	590,641,271	728,605,821	466,872,846
1879	R. B. Hayes	2,349,567,482	1,076,634,827	966,393,692	735,436,882	466,073,775
1880	R. B. Hayes	2,120,415,370	545,340,713	700,233,238	852,781,677	760,989,056
1881	J. A. Garfield	2,060,013,569	486,949,423	438,281,819	921,784,193	753,240,125
1882	C. A. Arthur	1,918,312,994	403,525,250	408,682,015	799,959,736	767,111,964
1883	C. A. Arthur	1,884,171,728	398,287,582	265,408,138	825,846,813	751,670,305
1884	C. A. Arthur	1,830,528,923	348,519,870	244,126,244	775,190,487	705,123,955
1885	G. Cleveland	1,876,424,275	323,690,706	260,226,935	784,421,280	623,769,652
1886	G. Cleveland	1,756,445,205	336,439,727	242,483,138	751,988,210	674,029,792
1887	G. Cleveland	1,661,461,536	371,403,278	267,932,180	752,180,902	752,490,560
1888	G. Cleveland	1,680,917,706	379,266,075	261,924,801	742,368,690	783,295,100
1889	B. Harrison	1,640,673,340	387,051,058	281,996,615	742,401,375	745,131,652
1890	B. Harrison	1,555,630,909	463,963,080	358,618,584	857,828,684	789,310,409
1891	B. Harrison	1,546,961,696	392,612,447	365,773,905	884,480,810	844,916,196
1892	B. Harrison					

FIRE. The value of property destroyed yearly in thousand dollars is: United States, $81,000; Russia, $70,000; Great Britain, $45,500; Germany, $31,000; Austria, $17,500; France, $15,500; Canada, $10,500; Scandinavia, $6,500; Italy, $5,000; Belgium, $2,600; Spain, $2,500; Holland, $2,000; total, $292,600.

The greatest average annual number of fires in cities of the world is in London. The greatest number of fires per inhabitant is in New York, the next largest Boston.

THE FIRE WASTE.

ANNUAL PROPERTY LOSSES IN THE UNITED STATES, 1875-1891.

Years.	Aggregate Property Loss.	Aggregate Insurance Loss.	Years.	Aggregate Property Loss.	Aggregate Insurance Loss.
1875	$78,102,285	$39,327,000	1884	$110,008,611	$60,679,818
1876	64,630,600	34,374,500	1885	102,818,796	65,170,709
1877	68,265,800	37,391,900	1886	104,924,750	60,505,564
1878	64,315,900	36,575,900	1887	120,283,055	69,659,508
1879	77,703,700	41,461,700	1888	110,885,665	63,965,724
1880	74,643,400	42,525,000	1889	123,046,833	73,679,465
1881	81,280,900	44,641,900	1890	91,789,835	
1882	84,505,024	48,875,131			
1883	100,146,228	54,808,661	Total	$1,457,354,122	

The figures in the above table from 1875 to 1890, inclusive, are taken from the Chronicle Fire Tables.

The waste by fire in the United States during the past three years has averaged $100,000,000 annually; an amount equal to double the annual interest charge on the national debt. To this must be added the expense of maintaining fire-extinguishing departments and appliances, and of conducting insurance companies, to obtain an estimate of what the people pay out on account of fire. The principal reported causes of fires, and the number of fires from each cause, in 1890, were as follows: Incendiarism, 1,731; defective flues, 829; sparks, 376; matches, 374; lamp explosions, 336; stoves, 336; lightning, 286; spontaneous combustion, 205; lamp and lantern accidents 173; gas jets, 169; carelessness, 119; furnaces, 117; cigar stubs and tobacco pipes, 111; locomotive sparks, 87; fireworks, 81. There were 5,005 fires classed as " Not reported, and 1,756 as " Unknown."

FIRE INSURANCE. See *Insurance.*

FIRES. The most disastrous fires of history are shown as follows:—

1570	Moscow	200,000 victims.	1835	New York	$30,000,000.
1666	London	13,200 houses.	1842	Hamburg	36,000,000.
1812	Moscow	15,500 "	1851	San Francisco	2,500 blocks.
1824	Cairo	4,000 victims.	1871	Chicago	$200,000,000.
1831	Constantinople	18,000 houses.	1872	Boston	75,000,000.

FISHERIES. The following table gives the product of 1880, viz:—

COUNTRIES.	Vessels.	Men. (Thousands.)	Tons Fish. (Thousands.)	Value (Thousands.)
United States	6,605	131	110	$13,046
Great Britain	34,900	113	380	17,750
France	21,100	85	130	17,400
Canada	11,200	53	260	12,250
Russia	13,500	68	220	11,250
Norway	16,600	113	145	8,300
Italy	18,200	61	100	5,000
Spain	10,200	38	50	2,500
Germany	8,100	17	40	2,000
Holland	2,000	8	20	1,000
Austria	2,800	7	15	750

70 per cent. of the sea fisheries of Great Britain are Herrings. The annual value of the British fisheries including fresh water fish, is nearly 20 million dollars, as follows: Salmon, $1,900,000; Cod, $700,000; Whale, $3,500,000; Herrings, $12,000,000; Pilchards, $150,000; Lobsters, etc., $4,500,000. A barrel of herrings contains 1,000, of pilchards, 3,000 fish. The value of the Candian Fisheries is: Cod, $2,600,000; Herring, $2,900,000; Seals, $1,400,000; Whales, etc., $5,350,000; total, $11,250,000.

The value of products by fisheries as shown by the Tenth Census of the United States is: General fishing, $22,405,018; Whale, $2,323,943; Seal, $2,289,813; Menhaden, $2,116,718; Oyster, $13,403,852; Sponge, $200,750; Marine Salt Industry, $305,890.

FLAX. The average annual production is:—

Countries.	Thousand Tons.	Thousand Acres.	Lbs. per Acre.	Countries.	Thousand Tons.	Thousand Acres.	Lbs. per Acre.
United States	12	161	175	Italy	23	203	255
Great Britain	25	154	360	Netherlands	38	187	450
France	51	165	510	Scandinavia	4	41	218
Germany	48	292	370				
Russia	270	1,950	280	Total	510	3,414	335
Austria	53	262	460				

The consumption in all countries is, in thousand tons: Great Britain, 104 France, 66; Germany, 35; Russia, 41; Austria, 60; Italy and Switzerland, 11; Belgium and Holland, 30; United States, 20.

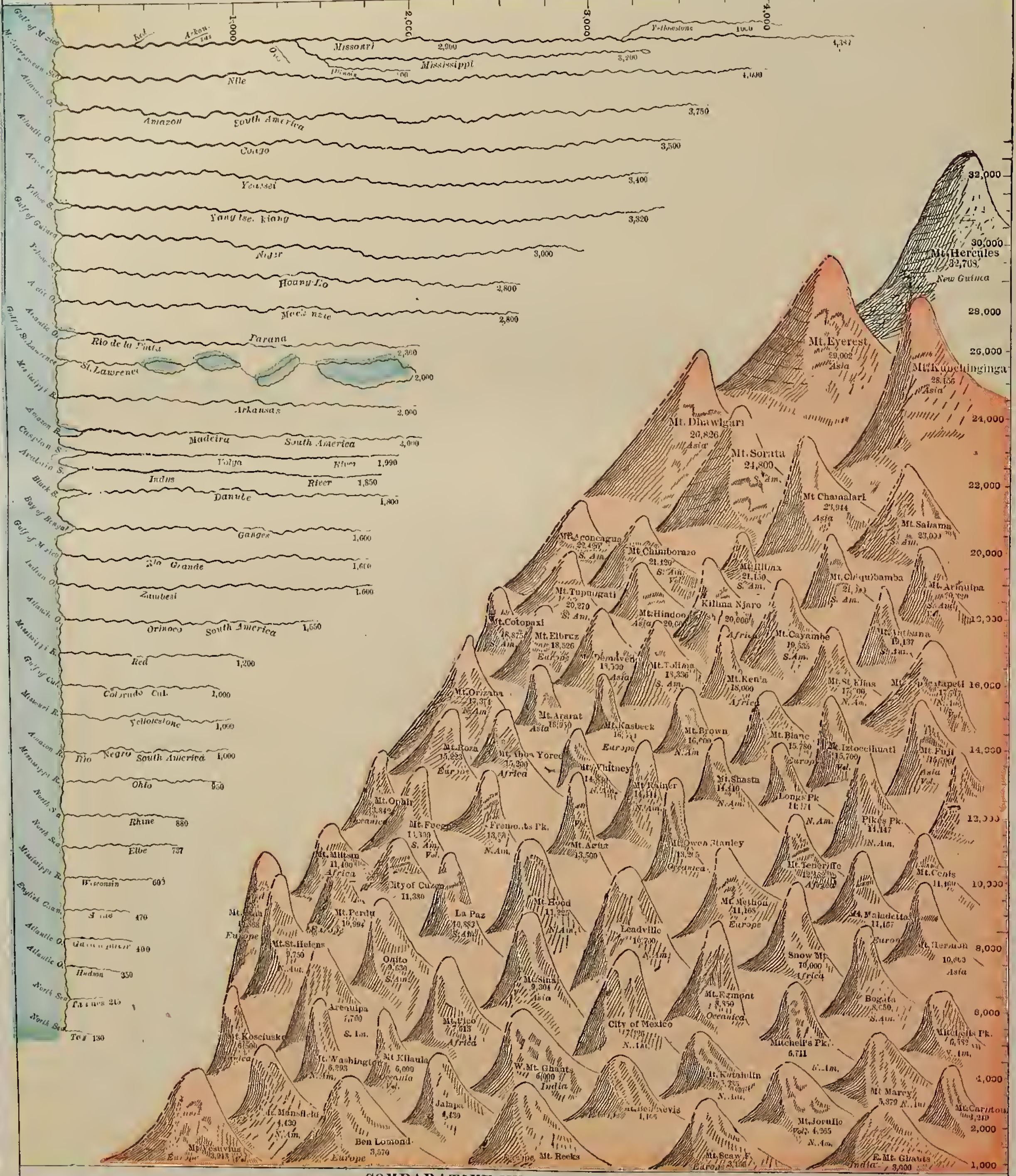
FLOODS.

DATE.	PLACE.	LOSS.	DATE.	PLACE.	LOSS.
1530	Holland	400,000 lives.	1849	New Orleans	1,600 houses.
1617	Catalonia	50,000 lives.	1874	Northampton, Mass	144 lives.
1642	China	300,000 lives.	1875	Toulouse	$75,000,000.
1646	Holland	110,000 lives.	1876	Bengal	200,000 lives.
1811	Danube, at Perth	24 villages destr'd.	1879	Szegedin	$42,500,000.
1813	Silesia	6,000 lives.	1879	Murcia	1,000 lives.
1830	Vienna	50,000 dwellings.	1882	Mississippi Valley	Great destruction.
1840	France	1,000 dwellings	1883	Rhine Valley	$30,000,000.
1846	Orleans	$20,000,000	1881	Ohio Valley	Great loss.
			1889	Johnstown, Pa.	5,000 lives.

In the Rhine Valley flood the area of country under water was 200 square miles, equal to the extent of the Lake of Constance.

FLOUR. The nutritive value of flour is as follows: Ordinary English, 100; German, 115; Canada, 127; Essex (England), 120; Scotch, 134; United States, 145. The largest milling center of the world at present is at Minneapolis, Minnesota, the 21 mills of which grind into flour annually over 25 million bushels of grain; the daily capacity being upward of 15,000 barrels per day.

COMPARATIVE LENGTH IN MILES
OF THE
PRINCIPAL RIVERS OF THE WORLD

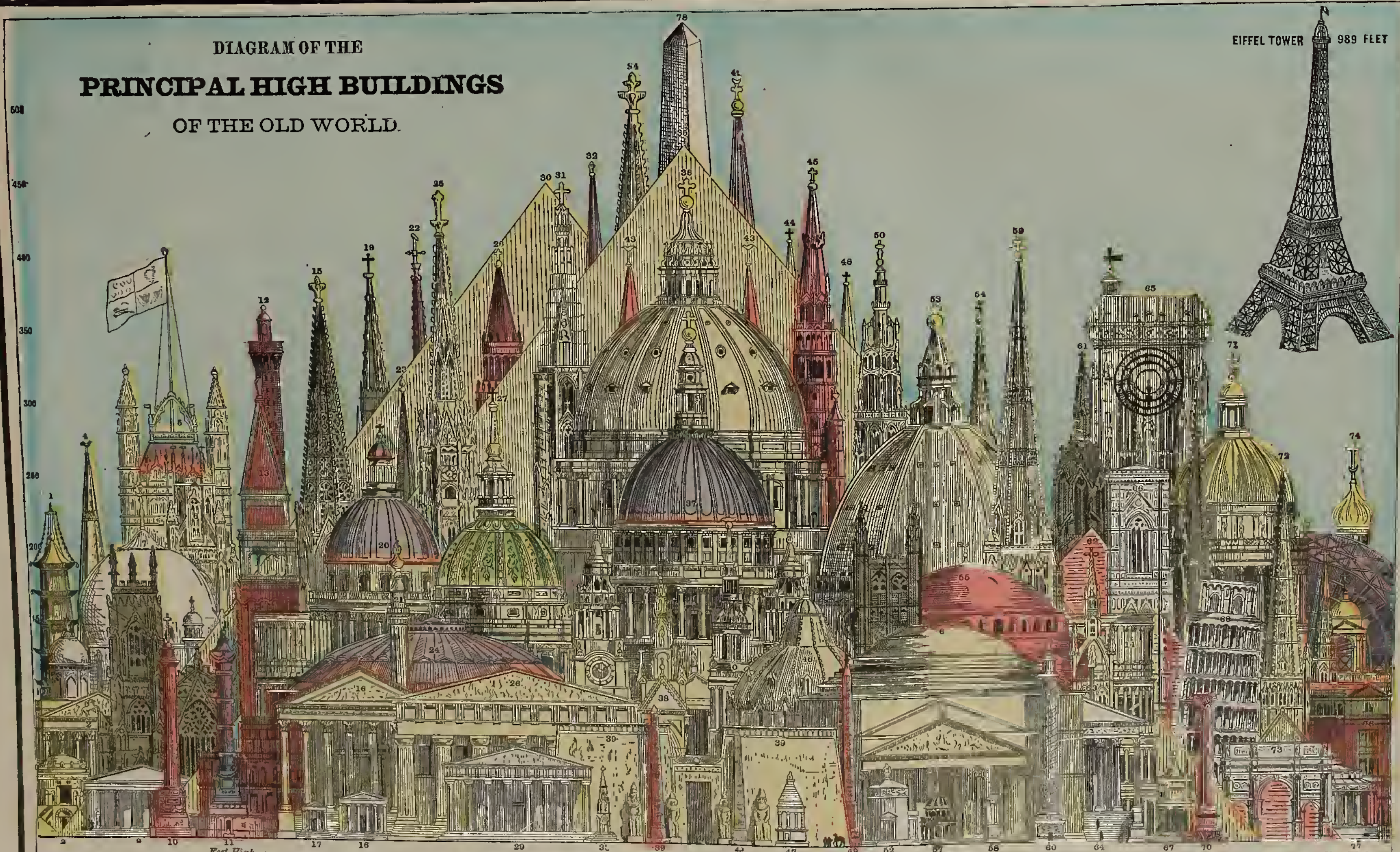


COMPARATIVE HEIGHT IN FEET
OF THE
PRINCIPAL MOUNTAINS OF THE WORLD

DIAGRAM OF THE

PRINCIPAL HIGH BUILDINGS

OF THE OLD WORLD.



		Feet High.
1.	Porcelain Tower, Nankin, China	200
2.	St. George's Hall, Liverpool	85
3.	Tomb of Theodoric, Ravenna	50
4.	Chichester Cathedral	271
5.	Victoria Tower, Westminster	331
6.	Boston Church, Lincolnshire	292
7.	Taj Mahal, Agra	220
8.	York Cathedral	198
9.	Temple of Bacchus, Teos	50
10.	Alexandrian Column, St. Petersb'g	154
11.	Column of July, Paris	154
12.	Torre Asinelli, Bologna	370
13.	Bell Tower, St. Mark's, Venice	323
14.	Coloseum, Rome	157
15.	Friburg Cathedral	385
16.	Temple of the Sun, Baalbec	120
17.	Temple on the Ilissus, Athens	25
18.	Erechtheium, Athens	35
19.	Chartres Cathedral	403
20.	Church of Ste Genevieve, Paris	274
21.	The Monument, London	202
22.	Amiens Cathedral	383
23.	Church of St. Theobald, Tharin	320
24.	Royal Albert Hall, London	154
25.	St. Stephen's Cathedral, Vienna	441
26.	Torazzo of Cremona	396
27.	Hotel des Invalides, Paris	310
28.	Temple of the Giants, Agrigentum	116
29.	Parthenon, Athens	66
30.	Second Pyramid, Gheezeh	447
31.	Rouen Cathedral	460
32.	Strasburg Cathedral	468
33.	Eleanor Cross, Waltham	60
34.	Cologne Cathedral	510
35.	Great Pyramid	460
36.	St. Peter's, Rome	448
37.	St. Paul's, London	360
38.	Albert Memorial	180
39.	Obelisk, Luxor	75
	Prophylon	70
40.	Bow Church, London	235
41.	Cleopatra's Needle	68
42.	Old St. Paul's, London	508
43.	Church of St. Mary, Lubeck	400
44.	Abbey of St. Stephen, Caen	400
45.	Church of St. Martin, Landshut	460
46.	The Baptistry, Pisa	190
47.	Tomb at Mylasa, Caria	50
48.	Church of St. Peter, Hamburg	380
49.	Obelisk in Piazza di San Giovanna in Laterano, Rome	153
50.	Antwerp Cathedral	403
51.	"Bell Harry" Tower, Canterbury	235
52.	Tower of the Winds, Athens	45
53.	The Cathedral, Florence	376
54.	Hotel de Ville, Brussels	374
55.	Mosque of St. Sophia, Constantinople	182
56.	Pantheon, Rome	143
57.	Chapel of St. Pietro Montorio, Rome	40
58.	Choragic Monument of Lysicrates, Athens	34
59.	Salisbury Cathedral	404
60.	Trajan Column, Rome	134
61.	Cathedral, Frankfort-on-Main	326
62.	Pyramid of Mycirinus	218
63.	Church of St. Nicholas, Newcastle-on-Tyne	201
64.	Temple of Jupiter Stator, Rome	98
65.	Mechlin Cathedral	319
66.	Bell Tower, Florence	266
67.	Tomb of Absolom, Jerusalem	54
68.	Norwich Cathedral	309
69.	Leaning Tower, Pisa	188
70.	Pompey's Pillar, Alexandria	100
71.	Church of St. Isaac, St. Petersburg	336
72.	Central Spire, Lichfield	252
	Western Spire	192
73.	Arch of Constantine, Rome	70
74.	Tower of Ivan Veliki, Moscow	260
75.	Central Transept, Crystal Palace	198
76.	Science Schools, South Kensington	110
77.	Temple of Vesta, Tivoli	55
78.	Washington Monument	555

The Red Tint indicates BRICK; *the Stone Color*, STONE; *the Pink*, GRANITE; *the Purple*, BRONZE, COPPER *or* LEAD; *and the Yellow*, GOLD.

There were 24,338 Grist and Flouring Mills in the United States (1880), with capital of $177,361,878, employing 58,407 hands, paying $17.422,316 for wages, having 59,612 run of stone, with a daily capacity of 4,730,106 bushels; total value of products, $505,185,712.

FOOD. The food of all nations is shown by the following table:—

COUNTRIES.	Grain per inhabitant.				Meat per inhabitant.				Liquor per inhabitant.			
	Production, Bushels.	Consumption, Bushels.	Surplus. Bushels.	Deficit. Bushels.	Production, lbs.	Consumption, lbs.	Surplus, lbs.	Deficit, lbs.	Wine. Gallons production	Wine. Gals., consumption.	Beer, gallons.	Spirits. gals.
United States	48 10	40.66	7 44	....	171.00	120.00	51.00	....	0 40	0.60	7 20	1 52
Great Britain	11 90	20 02	....	8 12	78 26	119 10	....	40 84	....	0 51	32.18	0.90
France	19.34	24.02	....	4.08	68 06	81 88	....	13.82	17.80	18 60	5 15	0.88
Germany	21.15	23 71	....	2 56	66.63	84 51	....	17 88	2 10	3.20	19.44	1.35
Russia	20.22	17 97	2.25	....	59 34	54 05	5.29	....	0 02	0 03	0.65	1 30
Austria	14.35	13 57	0 78	....	55.10	56 03	....	0 93	7.55	7.50	6 25	0 60
Italy	9.45	9 62	...	0.17	21.54	20 80	0 74	....	23.44	22.57	0 75	0 30
Spain	17 98	17 68	0 30	.	26 00	25 04	0 96	....	15.40	12.50	....	0.25
Belgium	17.25	22 84	....	5 59	37 60	57.10	....	19.50	....	0 72	30 70	2 80
Holland	12.50	16 25	....	3.75	80 75	48 40	32 35	....	....	0.76	8 75	2.90
Denmark	36.80	30 83	5.97	....	125.80	58 15	67 65	....	....	0 25	12.50	4.20
Sweden and Norway	11.75	12 05	....	0 30	72 80	51 10	21.70	....	....	0.25	5.40	4.20
Portugal	7.14	8.33	....	1.19	28 82	25.20	3 62	....	20.42	16 40	....	0.20
Greece, Turkey	7 50	6 66	0 84	....	45 00	45 00	....	....	2 00	1.80	....	0.10
Australia	21.10	14 59	6.51	....	790.00	120 00	670.00	....	0 75	1 30	? 00	1.36
Canada	40.30	38 11	2 19	....	153.00	120 00	33 00	....	....	0.11	?.00	0 30
River Platte	2 02	2.02	....	....	1183.00	200 00	983 00	....	0.33	6 20	2 00	0 25
Algeria	6 60	4 95	1.65	....	88 00	66.00	22.00	....	3.10	2.95	? 00	0 10
General average	20 23	20 19	0 04	....	77 00	68 87	8 13		6.56	6.53	8.02	1 06

FOOD SUPPLY of all Nations.

COUNTRIES.	Grain—Million Bushels.				Meat—Thousand Tons.				Production of		
	Production.	Consumption.	Surplus.	Deficit.	Production.	Consumption.	Surplus.	Deficit.	Wine—Million Gals.	Beer—Million Gals.	Spirits—Million Gals.
United States	2,390	2,020	370	—	3,816	2,740	1,076	—	20	360	76
Great Britain	410	690	—	280	1,205	1,808	—	603	0	1,110	31
France	740	910	—	170	1,002	1,228	—	226	660	192	33
Germany	950	1,065	—	115	1,340	1,700	—	360	90	880	61
Russia	1,620	1,440	180	—	2,116	1,925	191	—	20	50	105
Austria	560	530	30	—	960	975	—	15	290	245	24
Italy	270	275	—	5	224	215	9	—	660	20	8
Spain	305	300	5	—	196	188	8	—	260	0	4
Belgium	95	120	—	25	92	140	—	48	0	170	15
Holland	50	65	—	15	144	87	57	—	0	35	16
Denmark	74	62	12	—	112	52	60	—	0	25	8
Sweden and Norway	78	80	—	2	213	146	67	—	0	35	27
Portugal	30	35	—	5	54	47	7	—	88	0	1
Turkey and Greece	90	80	10	—	250	250	—	—	24	0	1
Australia	58	41	17	—	990	152	838	—	2	0	4
Canada	170	160	10	—	287	250	17	—	0	0	1
River Plate	6	6	—	—	1,310	272	1,038	—	1	1	1
Algeria	20	15	5	—	110	82	28	—	9	0	0
*THE WORLD.	7,916	7,894	22	—	14,421	12,277	2,144	—	2,124	3,123	416

*There are, moreover, 200 million bushels of wheat grown in India, of which one-tenth is exported; and beside the wine crop here given, the Cape produces 4½ million gallons, and Maderia, Canaries, etc., 5 millions.

The yearly consumption of necessaries per inhabitant in pounds is:—

	Grain.	Meat.	Butter.	Sugar.
United States	392	120	16	23
United Kingdom	320	105	13	68
France	505	74	4	21
Germany	587	69	8	21
Russia	490	48	3	7
Austria	410	64	5	14
Italy	420	23	1	7
Spain	390	49	0	5
Belgium and Holland	442	69	6	16
Denmark	475	70	15	31
Sweden and Norway	330	65	9	17
Average	445	70	7	20

The consumption of luxuries are as follows, per inhabitant:—

	Ounces.			Gallons.		
	Coffee.	Tea.	Tobacco.	Wine.	Beer.	Spirits.
United States	115	21	59	0 60	7.20	1.50
United Kingdom	15	72	23	0 44	28.60	1 05
France	52	1	29	20.12	5.10	0 90
Germany	83	1	72	2.70	19 41	1.32
Russia	3	7	26	0.38	0 80	2 20
Austria	35	1	80	7.50	6 50	0 80
Italy	18	1	22	17 60	0.70	0 30
Spain	4	1	32	13 50	0 10	0 20
Belgium and Holland	175	8	84	0 80	22 20	2 60
Denmark	76	8	61	0.30	12.60	4 30
Sweden and Norway	88	2	29	0 20	5.40	4 20
Average	44	11	41	5.50	8.60	1 10

There are many valuable items of food besides those in the foregoing tables. Grain is largely supplemented by potatoes in Ireland and Germany, and by chestnuts in Italy; moreover, this column does not include rice, the consumption of which is rapidly increasing. Meat includes fowl, but neither game nor fish, nor lard, all of which enter largely into European food. Cheese (q.v.) is another important item not included above. The same may be said of fruit and vegetables.

The cost of food in the United States (working classes) is exactly one-third the value of labor, whereas in Great Britain it is almost one-half and in France still more. Great Britain imports of food, compared with consumption, 37 per cent. of the meat, 58 of the cheese and butter, and 61 of the wheat, necessary for its annual supply. See *Diet.*

FOREIGN COINS. Value of See *Coin.*

FOREIGN RESIDENTS. The number in each of the several countries in 1880 in thousands was: United States, 6,680; France, 864; Italy, 273; Germany, 291; Brazil 243; Argentine, 212; Switzerland, 211; Great Britain, 161; Russia, 148; Austria, 127, Belgium, 98; Egypt, 83; Holland, 64; Denmark, 54; Chili, 27; China, 4; Japan, 2; See Diagram, page 39.

FOREIGN MINISTERS. See *Consular Service.*

FORESTS. See *Agriculture.*

FORESTS. Mulhall gives the forests of the world as follows (in million acres): Russia, 485 millions; United States, 176; Canada, 174; Brazil, 135; Scandinavia, 63; Austria, 46; Gran Chaco, 37; Germany, 33; France, 23; Italy, 11; Spain and Portugal, 8; Algeria, 6; United Kingdom, 2; Netherlands, 1½; total, 1,201½. Since 1848 the French have converted nine million acres of waste land into forest, producing about $2 an acre. Paris burns the timber of 50,000 acres yearly, requiring an area of 1 million acres of forest to keep up the supply. Woodcutters in the United States fell 10,000 acres daily, or 3 million acres per annum. There were 15,000 saw mills in the United States and 640 in Canada in 1882.

Deer forests cover 7 per cent. of Scotland, viz:—

County.	Acres.	County.	Acres.	County.	Acres.
Perth	255,000	Argyle	220,000	Aberdeen	175,000
Inverness	260,000	Ross	190,000	Various	280,000

The average rent is 26 cents per acre, whereas sheep runs pay only 20 cents an acre.

FORESTRY. See *Agriculture,* also *Timber.*

FORGES and Bloomeries. In 1880 there were 118 establishments, employing about 3,000 hands, burning 495 charcoal forge fires, running 141 hammers, with a daily capacity of 520 tons; total value of production, $3,968,074.

FORTS, Armories, Etc. Expenditures for See Diagram, page 43.

FRENCH ASSIGNATS. See *Paper Money.*

FRUIT. The degree of sugar in various fruits are: Peach, 1.6; Raspberry, 4.0; Strawberry, 5.7; Current, 6.10; Gooseberry, 7.2; Apple, 7.9; Mulberry, 9.2; Pear, 9.4; Cherry, 10 8; Grape, 14.9.

The United States have regularly imported since 1871 about 6 lbs. fruit per inhabitant per annum.

The number of varieties of the chief fruits known to modern pomologists is as follows: Almonds, 9; Apples, 1,570; Barberry, 1; Blackberries, 30; Butternut, 1; Cherries, 209; Chestnuts, 4; Citrons, 4; Cranberries, 3; Currants, 29; Figs, 16; Filberts, 8; Gooseberries, 81; Grapes, 232; Hickory nuts, 2; Lemons, 2; Lime, 1; Mulberries, 7; Musk-melons, 17; Nectarines, 32; Olives, 6; Oranges, 10; Peaches, 239; Pears, 1,087; Plums, 297; Pomegranates, 8; Quinces, 10; Raspberries, 88; Strawberries, 257; Walnuts, 5; Water-melons, 15.

See *Orchard Products,* Diagram page 42.

FUEL. The annual consumption of coal in million tons is: Great Britain, 130; United States, 70; Germany, 55; France, 27; Austria, 16; Belgium, 12; Prussia, 9; Italy, 3; Holland, 3; Spain, Portugal, Sweden, Norway, and Canada, each 2 The annual consumption of wood in millions of cubic feet is: Russia, 2,770; United States, 1,410; Austria, 1,120; France, 850; Germany, 760; Sweden and Norway, 320; Italy, 230; Canada, 140; Spain, 110; Great Britain, 60.

Pounds of water evaporated by 1 lb. of fuel as follows: Straw, 1.19; Wood 3.1; Peat, 3.8; Coke or Charcoal, 6.4; Coal, 7.9; Potatoes, 14.6.

FUNDS. The Educational benefactions of George F. Peabody, John F. Slater, and Paul Tulane are as follows:—

PEABODY FUND. In 1866 George Peabody, an American merchant resident in London, gave $2,100,000 (increased three year later to $3,500,000, for the promotion of education in the South. This was in addition to numerous other generous gifts for educational institutions in various parts of the United States. The annual distribution of the proceeds of this fund have been administered by a Board of Trustees, through the executive agency, first of Rev. B. Sears, LL. D., and later (since 1880) that of Hon. J. L. M. Curry, LL. D., of Richmond, Va The annual appropriations to the educational work in the several southern States since 1868 have been from $35,400 (1868) to $137,000 (1873).

SLATER FUND. In March, 1882, Mr. John F. Slater, of Norwich, Conn., gave $1,000,000 to several gentlemen in trust for the education of the freedmen of the South. Dr. A. G. Haygood, of Oxford, Ga., was appointed general agent for the distribution of the fund, and entered at once upon a careful investigation of the field. Through his valuable reports already published, he has given full indication of the action he will recommend. The need of provision for the industrial training of the freedmen is especially emphasized by Dr. Haygood.

TULANE FUND. In June, 1882, Mr. Paul Tulane, of Princeton, N. J., executed a trust deed conveying to certain persons incorporated under the name of "The Administrators of the Tulane Education Fund" certain real estate in the city of New Orleans, La., for the promotion and encouragement of intellectual, moral and industrial education among the white persons in the city of New Orleans, and for the advancement of letters, the arts and sciences therein. In 1883 this gift was increased by a further donàtion in cash, stocks and bonds. The total value of the benefaction is placed at $701,926.

FURNACES. In 1881 there were 2,503 furnaces; distributed as follows: Great Britain, 555; United States, 490; France, 270; Sweden, 224; Germany, 220; Russia. 206; Austria, 98; Belgium, 40. The furnaces of the United States employ 41.875 hands, $105,151,176 capital, and produce 19,248 tons of melted metal daily, consuming 7,256,684 tons of iron ore, 53,909,828 bushels of charcoal, 2,615,182 tons of anthracite and 1,051,753 tons of bituminous coal, and 2,128,255 tons of coke. The total value of products yearly is $89,315,569.

See *Iron and Steel*, Diagram, page 30.

FURS. See Description of *Alaska.*

GAELIC. The number of persons speaking Gaelic in Great Britain is: Ireland, 660,000; Scotland, 232,000; Wales, 350,000.

GARRISONS. Great Britain has abont 70,000 men in garrisons in India; 20,000 to 30,000 in Ireland; in England and Scotland, 60,000; Mediterranean, 11,000; West Indies, 6,400; Africa, 6,600; Ceylon, etc., 3,500. Germany garrisons the following places with the number of men bere given:

Berlin	17,800	Cologne	7,700	Madgeburg	6,100
Metz	14 400	Coblenz	6.400	Spandau	4,300
Strasburg	9,000	Konigsberg	6,400		
Mayence	7,700	Potsdam	6,600		

There are 29 smaller garrisons, ranging from 2,000 to 4,000 men each.

GEOLOGY. Prof. Phillips gives the following as thickness of the Earths strata in feet: Tertiary, 2,000; Cretaceous, 1,100; Golitic, 2,500; Saliferous, 2,000; Carboniferous, 20,000; and the following fossil remains:

Mammalia	144	Terrestrial plants	500
Reptiles	71	" animals	330
Fishes	183	Marine plants	40
Insects	74	" animals	6,065
Conchifera	2,026	Fresh-water plants	40
Gasteropoda	880	" animals	260
Kephalopoda	788		
Crustacea, etc	1,970	Total	7,235
Total	6,136		

GEYSERS. The most notable are in Iceland, California, Yellowstone Valley, and New Zealand. The Great Geyser and Strokr are the most important in Iceland—the former discharges once a day; reaching a height of about 80 to 100 feet. The geyser district of New Zealand is located in the upper basin of the Waikato River; they are second to those of the Yellowstone Valley. The geysers of Wyoming are the grandest, as well as most numerous intermittent spouting thermal springs in the world; they are fully described in the description of Wyoming—United States, which see.

GLASS. The glass industry of the United States (1880), was as follows: 211 establishments with $19,844,699 capital, 348 furnaces, 2,982 pots; employing 24,177 hands; paying $9,144,100 wages; value of products, $21,154,571, namely, glassware, $9,568,520; green glass, $5,670,423; plate glass, $868,305; window glass, $5,047,313.

GOLD. The worlds total production is estimated to be $7,240,000,000.

The total production in the United States is $1,430,000,000.

Gold can be beaten 1,200 times thinner than printing paper; one ounce will cover 146 square feet.

Gold is found associated with silver and other metals in all parts of the world, in always varying proportions.

Gold, coined and uncoined, has varied greatly in value within historic times. A pound of gold in London brought:

	£15	or $75.00
A.D. 1344	13 3 4	or 65.83
" 1345	14	or 70.00
" 1347	16 13 4	or 83.32
" 1412	20 16 8	or 104.16
" 1464	27	or 135.00
" 1526	34	or 170.00
" 1549	40 10	or 202.50
" 1605	44 10	or 222.50
" 1626	46 14 6	or 233.62
" 1718	56 6 10	or 283.91
" 1891		

The relative values of gold and silver have changed at different times, and we have collated a few of the more noteworthy variations in the subjoined table:

Herodotus recorded that	1 part	gold	equaled	13		of silver.
Alexander the Great's time	1 "	"	"	10		"
Rome after Punic War	1 "	"	"	17.57		"
Rome under Julius Cæsar	1 "	"	"	18.93		"
Century after Columbus	1 "	"	"	10	to 12	"
Following two centuries	1 "	"	"	14	to 16	"
England under William, 1689	1 "	"	"	15		"
Berlin in 1838	1 "	"	"	15.69		"
United States laws, 1792 and 1834	1 "	"	"	15 & 15 87		"
France under and since empire	1 "	"	"	15.50		"
London market value, 1889	1 "	"	"	22 03		"

See *Coin, Specie Money*, also Diagram, page 31.

GOVERNMENT LAND MEASURE. A township consists of 36 sections, each 1 mile square; a section contains 640 acres; a quarter section, ½ mile square—160 acres; an eighth section, ½ a mile long north and south, and ¼ mile wide—80 acres; and a sixteenth section, ¼ mile square, which is the smallest sized tract, except fractions, sold by the government. In the surveys of Public Lands of the United States, they are laid out in ranges of townships which run longitudinally, and are numbered on the maps in Roman characters, or capital letters, according to their proximity to the northern border of a State. The ranges of townships run from west to east; the extreme northern line of townships in any State would be all number 1, the next number 11, and so on down. In a township the sections are all numbered 1 to 36, beginning at the north-east corner as shown in the diagram.

6	5	4	3	2	NW | NE SW | SE
7	8	9	10	11	12
18	17	16	15	14	13
19	20	21	22	23	24
30	29	28	27	26	25
31	32	33	34	35	36

GRAIN. The Wheat crop of the principal grain growing nations of the world is shown by the following table:

Countries.	Period.	Average Annual Yield.	Countries.	Period.	Average Annual Yield	Countries.	Period.	Average Annual Yield.
		Bushels.			Bushels.			Bushels.
United States	1886	457,218 000	Spain	1883	117,000,000	Portugal	1877	8,722,517
France	1872–83	340,323,377	Great Britain.	1884	85,000,000	Greece	1884	5,000,000
India	1884	252,000,000	Australia	1884	45,014,174	Sweden	1874-82	4,483,333
Russia	1884	220,000,000	Belgium	1882	42,373,349	Servia	1883	4,000,000
Italy	1872–82	146,173,634	Turkey	1883	40,031,000	Norway	1884	2,750,000
Germany	1878–83	117,780,505	Roumania	1884	28,000,000	Denmark	1875.82	2,428,415
Austria-H'ry	1874–82	117,140,308	Mexico	1883	12,455,421	Switzerland	1884	2,000,000
			Netherlands	1870–82	11,393,917			

The principal grain crops of the United States for 1886 were: Corn, 1,665,441,000 bushels; Wheat, 457,218,000; Oats, 624,134,000; Barley, 61,206,292; Rye, 28,637,594.

The crops of the world in million bushels are: Wheat, 2,076; Corn, 1,960; Oats, 1,794; Rye, 1,408; Barley, 819; other crops, 340; total, 8,397.

No crop suffers less from drought or gives better returns in suitable climate than corn. Its average yield per acre is 23 bushels. In the United States corn is mostly used for fattening pigs. The United States produces 90 per cent. of the entire corn crop of the world. See *Agricultural Products*,

YIELD OF THE FIVE LEADING GRAIN CROPS OF THE UNITED STATES FOR SIX YEARS.

	1885.	1886.	1887.	1888.	1889.	1890.
	Bushels.	Bushels.	Bushels.	Bushels.	Bushels.	Bushels.
Corn	1,936,176,000	1,665,441,000	1,456,161,000	1,987,790,000	2,112,892,000	1,489,970,000
Wheat	357,112,000	457,218,000	456,329,000	415,868,000	490,560,000	399,262,000
Oats	629,409,000	624,134,000	659,618,000	701,636,000	951,515,000	523,621,000
Barley	59,428,000	58,360,000	56,812,000	63,884,000		
Rye	24,489,000	21,756,000	20,691,000	28,415,000		
Total	3,006,614,000	2,826,909,000	2,649,641,000	3,197,823,000		

GRANITE is worth about $1.00 per cubic foot, and requires a crushing force of 24,500 lbs. to a half inch cube.

GRAVITY, Specific compared with water. A gallon of wine or water weighs 10 pounds.

LIQUIDS.		TIMBER.		METALS.	
Water	100	Cork	24	Zinc	719
Sea Water	103	Poplar	38	Cast iron	721
Dead Sea	124	Fir	55	Tin	729
Alcohol	84	Cedar	61	Bar iron	778
Olive Oil	92	Pear	66	Steel	784
Turpentine	99	Walnut	67	Copper	869
Wine	100	Cherry	72	Brass	840
Urine	101	Maple	75	Silver	1,051
Cider	102	Apple	79	Lead	1,135
Beer	102	Ash	84	Mercury	1,357
Woman's Milk	102	Beech	85	Gold	1,926
Cow's "	103	Mahogany	106	Platina	1,950
Goat's "	104	Oak	117		
Porter	104	Ebony	133		

PRECIOUS STONES.

Emerald	277.5	Diamond	353 0	Garnet	406 2
Crystal	265.3	Topaz	401.1	Ruby	428.3

SUNDRIES.

Indigo	77	Peat	188	Porcelain	226
Gunpowder	93	Opium	134	Stone	252
Butter	94	Honey	145	Marble	270
Ice	92	Ivory	183	Granite	278
Clay	121	Brick	210	Chalk	279
Coal	130	Sulphur	203	Glass	289

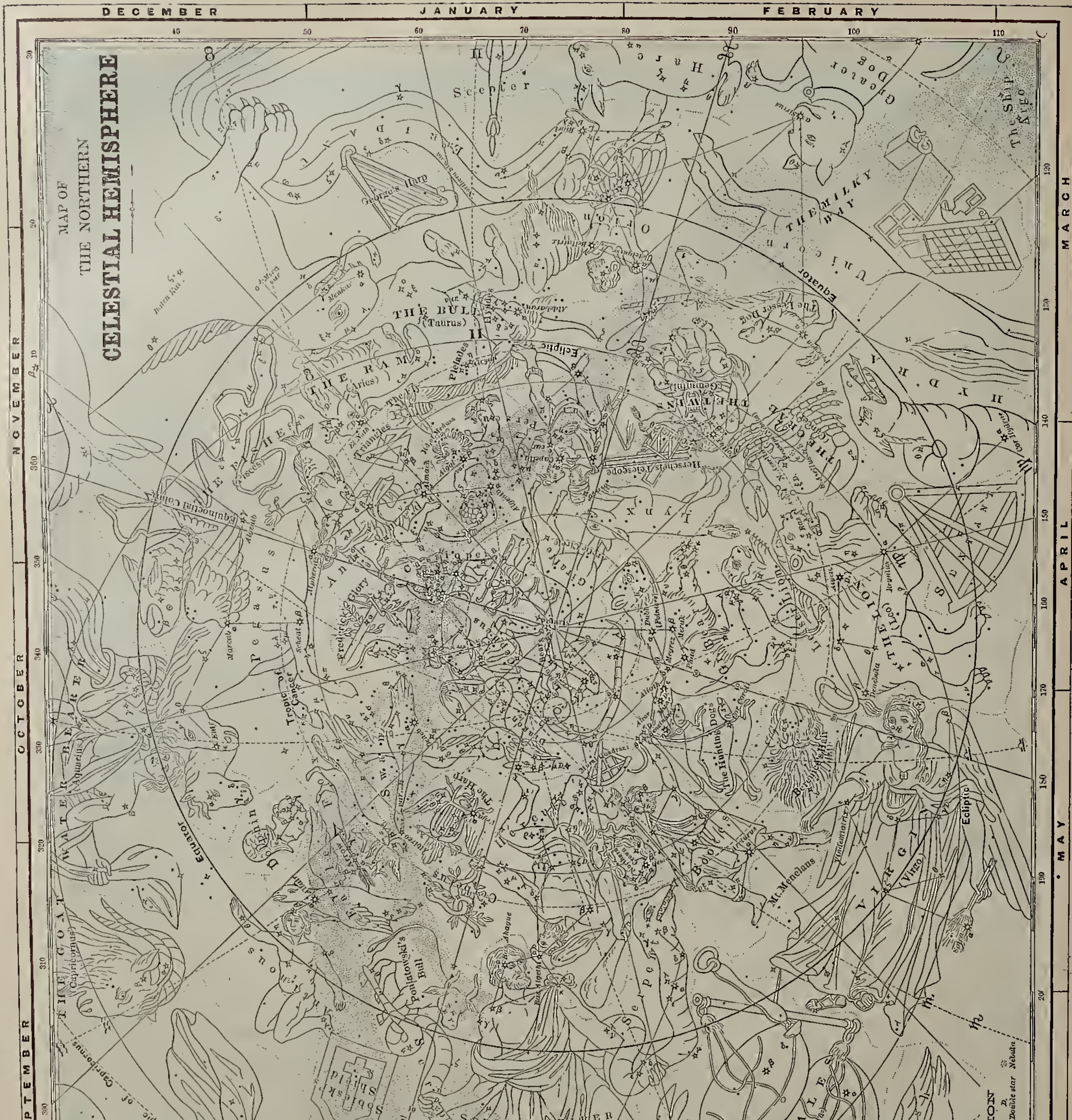
WEIGHT IN CUBIC FEET.

	Lbs. per Cub. ft.		Lbs. per Cub. ft		Lbs. per Cub. ft.
Cork	15	Oak	50	Iron	470
Cedar	36	Clay	72	Copper	520
Beech	51	Coal	80	Silver	630
Butter	56	Brick	120	Lead	680
Water	62	Stone	150	Gold	1,155
Mahogany	66	Granite	166		
Ice	70	Glass	172		

GREENBACKS. See *Paper Money*, and Diagram, page 31.

GRIST and Flouring Mills. See *Flour.*

GUANO. The Peruvian Government exported from the Chincha Islands between 1850 and 1880 over 12 million tons, worth 550 million dollars.


MAP OF
THE NORTHERN
CELESTIAL HEMISPHERE
DECEMBER
JANUARY
FEBRUARY
MARCH
APRIL
MAY
JUNE
JULY
AUGUST
SEPTEMBER
OCTOBER
NOVEMBER
Sceptre
Hare
Greater Dog
The Ship Argo
George's Harp
Orion
THE MILKY WAY
Unicorn
Equator
The Lesser Dog
THE BULL (Taurus)
Ecliptic
Pleiades
THE RAM (Aries)
The Triangles
Perseus
THE TWINS (Gemini)
HYDRA
THE CRAB (Cancer)
Herschel's Telescope
Lynx
Equinoctial Colure
Pegasus
Andromeda
Cassiopeia
Frederick's Glory
Camelopard
Polaris
Tropic of Cancer
THE LION (Leo)
Sextant
THE WATER BEARER (Aquarius)
Dolphin
Swan
The Harp
The Hunting Dogs
Berenice's Hair
Boötes
Mt. Menelaus
VIRGIN (Virgo)
THE GOAT (Capricornus)
Tropic of Capricornus
Antinous
Poniatowski's Bull
Sobieski's Shield
Serpent
SERPENT BEARER (Ophiuchus)
SCALES (Libra)
Solstitial Colure
THE MILKY WAY
THE ARCHER (Sagittarius)
SCORPION
Antares
Ecliptic
EXPLANATION
1st 2nd 3rd 4th 5th Magnitude
var. variable
D. Double star
Nebula
Fisk & Co. Engr's N.Y.

MAP SHOWING THE DIVISIONS OF STANDARD TIME.

INTER-COLONIAL STANDARD TIME

At Charlottetown, Prince Edward Island ....is	10	min.	faster	than Solar Time.
“ Halifax, N. S....	5	“	faster	“ “
“ Moncton, N. B...,	20	“	fuster	“ “
“ St. Johns, N. B...	24	“	faster	“ “
“ St. Stephens, N. B	29	“	faster	“ “

EASTERN STANDARD TIME

At Albany, N. Y.....is	5	min	slower	than Solar Time
“ Baltimore, Md....	6	“	faster	“ “
“ Bangor, Me.......	25	“	slower	“ “
“ Boston, Mass...,.	16	“	slower	“ “
“ Buffalo, N. Y.....	16	“	faster	“ “
“ Cambridge, Mass.	16	“	slower	“ “
“ Charleston, S. C..	20	“	faster	“ “
“ Columbia, S. C...	24	“	faster	“ “
“ Danville, Va	18	“	faster	“ “
“ Hamilton, Ont....	19	“	faster	“ “
“ Hartford, Ct.......	9	“	slower	“ “
“ Montreal, Que....	6	“	slower	“ “
“ New Haven, Ct...	4	“	slower	“ “
“ New London, Ct..	11	“	slower	“ “
“ New York, N. Y..	4	“	slower	“ “
“ Ottawa, Ont......	3	“	faster	“ “
At Philadelphia, Pa.	1	min.	faster	than Solor Time.
“ Pittsburgh, Pa..,..	20	“	faster	“ “
“ Port Hope, Ont,..	14	“	faster	“ “
“ Portland, Me.....	19	“	slower	“ “
“ Portsmouth, Va..	7	“	faster	“ “
“ Providence, R I..	14	“	slower	“ “
“ Quebec, Que. ...,	15	“	slower	“ “
“ Richmond, Va....	10	“	faster	“ “
“ Toronto, Can	17	“	faster	“ “
“ Washington, D. C.	8	“	faster	“ “
“ Wilmington, N. C.	12	“	faster	“ “

CENTRAL STANDARD TIME

At Atchison, Kan. ..is	20	min.	faster	than Solar Time.
“ Atlanta, Ga.......	22	“	slower	“ “
“ Augusta, Ga	32	“	slower	“ “
“ Burlington, Ia....	4	“	faster	“ “
“ Chicago, Ill.	9	“	slower	“ “
“ Cincinnati, Ohio .	22	“	slower	“ “
“ Cleveland, Ohio...	33	“	slower	“ “
“ Columbus, Ohio..	28	“	slower	“ “
“ Detroit, Mich.....	28	“	slower	“ “
“ Dubuque, Ia......	3	“	fuster	“ “
“ Galveston, Tex .	19	“	faster	“ “
“ Hannibal, Mo.....	6	“	faster	“ “

CENTRAL STANDARD TIME

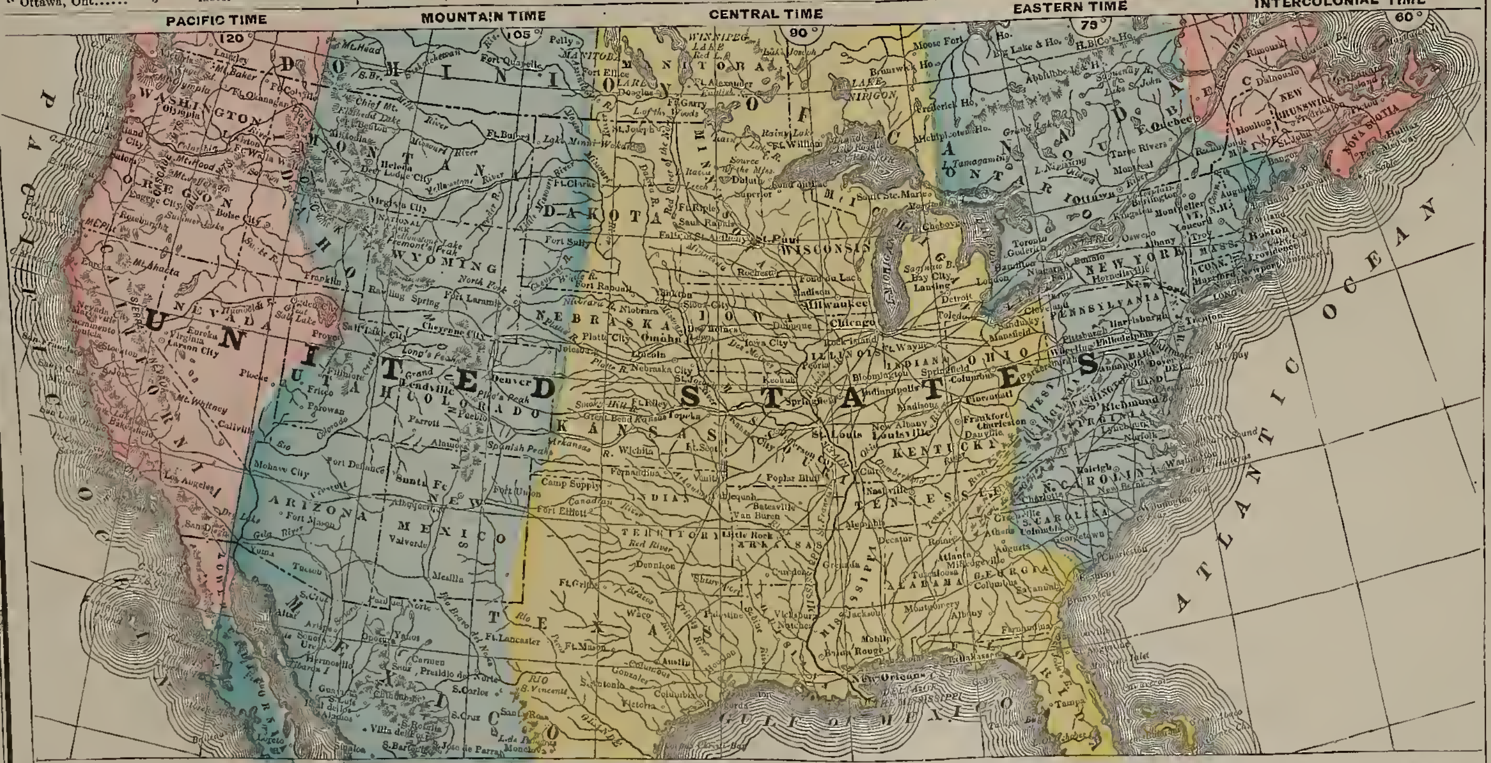
At Houston, Tex.....	21	min.	faster	than Solar Time.
“ Indianapolis, Ind.	16	“	slower	“ “
“ Jacksonville, Ill..	2	“	faster	“ “
“ Jefferson Cy., Mo.	9	“	faster	“ “
“ Kansas City, Mo..	19	“	faster	“ “
“ Knoxville, Tenn..	24	“	slower	“ “
“ Louisville, Ky....	18	“	slower	“ “
“ Lincoln, Neb.....	27	“	faster	“ “
“ Little Rock, Ark..	9	“	faster	“ “
“ Macon, Ga........	29	“	slower	
“ Memphis, Tenn..,	No change.			
“ Meridian, Miss...	6	min.	slower	“ “
“ Milwaukee, Wis..	8	“	slower	“ “
“ Minneapolis, Minn	13	“	faster	“ “
“ Mobile, Ala.	8	“	slower	“ “
“ Nashville, Tenn..	13	“	slower	
“ New Orleans, La..	No change.			
“ Omaha, Neb.....,	24	min.	faster	“ “
“ Pensacola, Fla....	11	“	slower	“ “
“ Peoria, Ill	2	“	faster	“ “
“ Quincy, Ill.......	6	“	faster	“ “
“ Rome, Ga.........	24	“	slower	“ “
“ St Joseph, Mo...	18	“	faster	“ “
“ St. Louis, Mo....	1	“	faster	“ “
“ St. Paul, Minn...	12	min	faster	than Solar Time
“ Savannah, Ga.....	26	“	slower	“ “
“ Selma, Ala.......	12	“	slower,	“ “
“ Shreveport, La ...	11	“	faster	“ “
“ Sioux City, Ia...	26	“	faster	“ “
“ Springfield, Ill...	2	“	slower	“ “
“ Terre Haute, Ind	10	“	slower	“ “
“ Vicksburgh, Miss.	3	“	faster	“ “
“ Vincennes, Ind...	9	“	slower	“ “
“ Winona, Minn....	7	“	faster	“ “

MOUNTAIN STANDARD TIME

At Bismark, Dak....is	17	min,	slower	thar. Solar Time.
“ Denver, Col......	No change.			
“ Helena, Mont ...	28	min.	faster	“ “
“ Laramie, Wy. T..	2	“	faster	“ “
“ Salt Lake Cy. Utah	27	“	faster	“ “
“ Santa Fe, N. M...	3	“	faster	“ “
“ Tucson, Ariz	24	“	faster	“ “
“ Virginia Cy., Mont	26	“	faster	“ “

PACIFIC STANDARD TIME

At Los Angeles, Cal is	7	min.	slower	than Solar Time,
“ Portland, Ore.....	10	“	faster	“ “
“ San Fr'isco, Cal..	10	“	faster	“ “
“ Yuma, Ariz.......	22	“	slower	“ “


PACIFIC TIME
MOUNTAIN TIME
CENTRAL TIME
EASTERN TIME
INTERCOLONIAL TIME
120°
105°
90°
75°
60°
UNITED STATES
DOMINION OF CANADA
PACIFIC OCEAN
ATLANTIC OCEAN
GULF OF MEXICO
MEXICO
WASHINGTON
OREGON
CALIFORNIA
NEVADA
IDAHO
MONTANA
WYOMING
UTAH
COLORADO
ARIZONA
NEW MEXICO
DAKOTA
NEBRASKA
KANSAS
INDIAN TERRITORY
TEXAS
MINNESOTA
IOWA
WISCONSIN
MICHIGAN
ILLINOIS
INDIANA
OHIO
KENTUCKY
TENNESSEE
ARKANSAS
MISSISSIPPI
ALABAMA
GEORGIA
FLORIDA
S. CAROLINA
N. CAROLINA
VIRGINIA
PENNSYLVANIA
NEW YORK
MANITOBA
ONTARIO
QUEBEC
NEW BRUNSWICK
NOVA SCOTIA

EXPLANATION.—Central Time is based upon that of the 90th meridian, and is nine minutes slower than Chicago Solar Time. Eastern Time is based upon the 75th meridian, which is one hour faster than Central Time, or four minutes slower than New York City Time. Inter-colonial Time is based upon the 60th meridian, and is two hours faster than Central Time. Mountain Time is based upon the 105 meridian, and is one hour slower than Central Time. Pacific Time is based upon the 120 meridian, and is two hours slower than Central Time. The colors upon the above map represent the localities governed by the several standards of railway time.

GUNPOWDER. The following table gives the proportionate parts used in manufacture in the various countries:—

	Salt-peter.	Char-coal.	Sul-phur.	Total.		Salt-peter.	Char-coal.	Sul-phur.	Total.
American........	75	13	12	100	Austrian	72	17	11	100
English	75	15	10	100	Spanish..........	56	11	13	100
French....... ..	75	13	12	100	Swedish	75	16	9	100
German	75	11	14	100	Chinese..........	76	14	10	100
Russian.	74	14	12	100	Sporting..........	77	13	10	100

GYPSIES. There are 712,000 in Europe distributed as follows: England, 18,000; Russia, 15,000; Scandinavia, 7,000; Spain, 40,000; Austria, 197,000; Roumania, 193,000; Turkey, 200,000; Germany, etc., 42,000.

HAMS and Bacon. The exports from the United States in 1886 was valued at $31,640,211. The same period the export of Pork was valued at $5,119,426.
See *Pork Packing.*

HARVESTING. The months for gathering the harvests of the year throughout the world, are as follows:

January.—Harvest is ended in most districts of Australia, and shipments have been made of the new crop. Chili, New Zealand, Argentine Republic.

February.—Upper Egypt, India.

March.—Egypt, India.

April.—Coast of Egypt, Syria, Cyprus, India, Persia, Asia Minor, Mexico, Cuba.

May.—Persia, Asia Minor, Algeria, Syria, Texas, Florida, Morocco, mid-China, Japan, Central Asia.

June.—Spain, Portugal, Italy, Hungary, Turkey, Roumelia, Danube, South Russia, South of France, Danubian Principalities, Greece, Sicily, California, Oregon, Louisiana, Mississippi, Alabama, Georgia, Carolina (North and South), Tennessee, Virginia, Kentucky, Kansas, Arkansas, Utah, Colorado, Missouri.

July.—Southern, Eastern and Midland, English countries, Oregon, Nebraska, Minnesota, Wisconsin, Iowa, Illinois, Indiana, Michigan, Ohio, New England, New York, Virginia, Ontario, France, Germany, Austria, Hungary, Switzerland, Italy, Russia, Poland.

August.—Great Britain, France, Germany, Belgium, Holland, Manitoba, Columbia (British), Lower Canada, Hudson's Bay Territory, Denmark, Poland.

September.—Scotland, England: Hops and roots. America: Corn. Athabasca: Wheat, barley, etc. Sweden, North Russia, France: Beet-root, buckwheat.

October.—Scotland, America: Corn crop. France, Germany: Vintage.

November.—Australia (north), Peru, South Africa.

December.—Australia (south), Chili, Argentine Republic.

HATS. In the manufacture of wool hats there are 43 establishments in the United States; employing 5,470 hands; capital, $3,615,830; consuming 1,864,139 lbs. of foreign wool, and 6,107,471 lbs. of domestic; producing 699,428 yards cloths, etc., 1,391,862 dozen wool hats, 8,194 yards felt lining, 109 yards saddle felt, and 3,176 felt skirts; total value, $8,516,569.

HAY. The total production in the United States in 1886 was 45 million tons; average price per ton, $7.36; total value, 331 million dollars. This is nearly 2 million tons less than in 1885, and a loss in value over the crop of the previous year of 75 million dollars. New York State produces one-seventh of the entire crop, Illinois next, with Pennsylvania third. The world's production in million tons is: United States, 45; Germany, 26; Russia, 20; Austria, 15; France, 14; Scandinavia, 7; Great Britain, 4; Italy, 3; Belgium and Holland, 3; Spain and Portugal, 2; total, 139 millions; over one and a quarter thousand million dollars.

HEAT. Scale in degrees Fahrenheit:—

Degree.		Degree.		Degree.	
32 ..	Ice melts.	305....	Petroleum boils.	950.. .	Antimony melts.
50 ...	Temperature of globe.	420....	Tin melts.	1,140....	Heat of common fire
96....	Lard melts.	476 ...	Bismuth melts.	1,859....	Silver melts.
98....	Blood Heat.	594 ...	Lead melts.	1,983....	Gold melts.
150 ..	Gutta Percha melts.	600 ..	Linseed oil boils.	2,223 ..	Brass melts.
174 ..	Alcohol boils.	630....	Quicksilver boils.	2,400 ...	Glass melts.
212 ...	Water boils.	740....	Zinc melts.	3,479 ...	Iron melts.

Taking water at 1,000, the specific heat is: Lead, 29; Mercury, 33; Silver, 56; Zinc, 93; Copper, 95; Iron, 110; Glass, 117; Sulphur, 188.

Degrees of Cold above zero at which the following articles freeze: Strong Wine, 20; Turpentine (spirits), 15; Milk, 29; Water, 32.

HEIGHT. See *Buildings.*

HEIGHT OF MOUNTAINS. See Diagram, page 50.

HEMP. The production in thousand tons is: Austria, 110; Italy, 90; Russia, 60; France, 50; Holland, 50; Manilla, etc., 15. Great Britain consumed in 1881, 78,800 tons. The United States in 1883 imported flax, hemp, and jute to the value of $5,118,508. Since that year all manufacturers of flax, hemp, and jute are classed together.

HENS. See *Eggs.*

HERRING FISHERY. See *Fisheries.*

HIDES. The United States Census of 1880 shows 2,319 establishments engaged in manufacturing curried leather, and 3,105 in tanned leather; the former producing 12,464,299 sides of leather, and 10,655,606 skins; total value of production, $71,351,297. In tanned leather there was used 11,773,171 hides and 19,936,658 skins; producing 23,546,342 sides and 19,917,653 skins; valued at $113,348,336. A cow's hide gives 35 lbs., a horse's 18 lbs. of leather.

HIGHEST ALTITUDES in each State. The United States Geological Survey in 1886 published a report on altitudes in the United States, from which the following table, exhibiting the highest point in each of the States and Territories, has been compiled:

State or Territory.	Name of Place.	Height.
Alabama	Valley Head...	1,031
Alaska	St. Elias...........	19,500
Arizona	Humphrey's Peak.	12,562
Arkansas	Bentonville........	1,790
California	Mt. Whitney.......	14,898
Colorado..........	Blanca Peak.......	14,464
Connecticut.......	Norfolk...	1,220
Dakota.............	Harney's Peak.....	9,700
Delaware	Dupont	282
Distr't of Columbia	Soldier's Home	330
Florida	Highland	210
Georgia	Sitting Bull Mo'tn.	5,046
Idaho..	Meade Peak	10,541
Illinois	Warren	1,005
Indiana	Bloomingsport.....	1,225
Indian Territory...	Fort Sill	1,190
Iowa	Alta	1,519
Kansas.............	Carthage..........	5,009
Kentucky	Pine Knob........	1,428
Louisiana.	Shreveport.........	198
Maine.	Mt. Katahdin	5,200
Maryland	Altamont.........	2,620
Massachusetts.....	Mt. Hoosac	2,510
Michigan	Porcupine Moun'tn	2,023
Minnesota..	Woodstock	1,822
Mississippi	Pantotoc Ridge ...	516
Missouri	Cassville.	3,000
Montana...........	Cabinet	12,187
Nebraska.	Fort Gratton.......	8,325
Nevada	Wheeler's Peak....	13,036
New Hampshire....	Mt. Washington....	6,288
New Jersey	High Knob.	1,799
New Mexico.......	Cerro Blanco..	14 269
New York..	Mt. Marcy	5 379
North Carolina	Clingman's Mou'tn	6,727
Ohio...............	Silver Creek	1,392
Oregon........ .. .	Mt. Pitt...........	9,818
Pennsylvania	Avondale	2,821
Rhode Island .. .	Pascoag....	396
South Carolina....	Rich Mountain.....	3,569
Tennessee..........	Clingman's Dome..	6,660
Texas..............	North Franklin Mt.	7,069
Utah...............	Mt. Emmons......	13 694
Vermont..........	Mt. Mansfield......	4,430
Virginia	White Top.	5,530
Washington Ter....	Mt. Je erson.......	15,500
West Viginia	Bayard	3,150
Wisconsin	Pewaukee Lake....	1,801
Wyoming..........	Fremont's Peak ...	13,790

There are, above 10,000 feet in altitude, 6 points in Alaska, 13 in Arizona, 43 in California, 246 in Colorado, 3 in Idaho, 12 in Montana, 27 in Nevada, 33 in New Mexico, 66 in Utah, 4 in Washington Territory, and 46 in Wyoming.

HOGS. See *Pork.*

HOLIDAYS. The Legal Holidays in the various States are as follows:—

January 1st, New Year's Day, is a legal holiday in all the states except Arkansas, Delaware, Kentucky, Massachusetts, New Hampshire, Rhode Island and South Carolina.

January 8th, Anniversary of the Battle of New Orleans, in Louisiana.

February 22nd, or Washington's Birthday, is a legal holiday in all the states but Alabama, Arkansas, Indiana, Iowa, Kansas, Missouri, Oregon, Tennessee, Texas. *Mardi Gras* in the cities of Mobile, Montgomery and Selma, Ala.

March 2d, Anniversary of Texan Independence, Texas.

March 4th, Fireman's Anniversary, New Orleans, Louisiana.

April 8, Good Friday, in Louisiana, Maryland, Minnesota, and Pennsylvania.

April 21, Anniversary of the Battle of San Jacinta, in Texas.

April 26th, Memorial Day, Georgia.

May 30th, or Decoration Day, is a legal holiday in California, Colorado, Connecticut, Illinois, Iowa, Maine, Massachusetts, Michigan, New Hampshire, New Jersey, New York, Pennsylvania, Rhode Island, Vermont and Wisconsin.

July 4th, Independence Day, is a legal holiday in all the states and territories.

December 25th, Christmas Day, is a legal holiday in all the states and territories.

Thanksgiving Day and Public Fast Days, appointed by the President of the United States, are legal holidays. Such days are legal holidays in such states as may set them apart for religious observances by the proclamation of the governor.

Days appointed for General Elections, State or National, are legal holidays in California, Illinois, Maine, Missouri, New Jersey, New York, Oregon, South Carolina and Wisconsin.

Good Friday is a legal holiday in Florida, Louisiana, Minnesota and Pennsylvania.

Shrove Tuesday is a legal holiday in Louisiana, and in the cities of Mobile, Montgomery and Selma, Alabama.

HOMESTEAD GRANTS. In 1862 a Homestead law was passed in the United States to encourage settlers from Europe. The method of securing the same is more generally described under the subject of (q. v.) *Homestead Laws.* Since 1870 over 100 million acres to fully 500,000 families have been given away. The Homestead Entries for 1886 were 9,145,135 acres; Timber Culture Entries, 5,391,309 acres; a total of 14,536,444 acres; being the largest number in any one year. Free grants or Homesteads are also given to actual settlers in Canada, Australia (except Chinamen), Algeria (French extraction only).

HOMESTEAD EXEMPTION. See *Exemptions.*

HOMESTEAD LAWS. Under the Homestead Laws any citizen, or intending citizen, has the right to 160 acres of the $1.25 land, or 80 acres of the $2.50 land, after an actual settlement and cultivation of the same for five years. Under the timber culture law any settler who has cultivated for two years as much as five acres of trees of an 80 acre homestead, or ten acres of a homestead of 160 acres, is entitled to a free patent for the land at the end of three years.

The public lands of the United States still unsold and open to settlement are divided into two classes, one class being sold by the Government for $1.25 per acre, as the minimum price; the other at $2.50, being the alternate sections reserved by the United States in land grants to railroads, etc. Such tracts are sold upon application to the Land Register. Heads of families, or citizens over twenty-one years, who may settle upon any quarter section (or 160 acres) have the right under the pre-emption law of prior claim to purchase, on complying with the regulations,

HOPS. Over 80 per cent. of the hops grown in the United States are raised in the State of New York. In 1884 hops sold in the United States markets at from 18 to 32 cents per lb.; in 1886, from 5 to 28 cents.

The world's average annual crop in tons is: England, 26,000; Germany, 19,000; United States, 15,000; France, 4,500. England consumes 33,000 tons yearly. Germany consumes only three-fourths of her crop, but England has to import annually 7,000 tons.

HORSES. The number in the United States, census of 1880, was 10,357,488: and mules and asses, 1,812,808; the former valued at $833,734,400; the latter, $161,214,976. It is estimated that there are in the world 52 million horses, representing a value of nearly three thousand millions dollars. The number in each country is in thousands as follows: Russia, 16,200; United States, 10,357; River Platte, 5,150; Austria, 3,760; Germany, 3,360; Great Britain, 2,906; France, 2,833; Australia, 1,605; Canada, 866; Italy, 658; Spain, 590; Roumania, 550; Sweden, 466; Denmark, 352; Algeria, 350; Belgium, 283; Holland, 280, Cape Colony, 241; Norway, 152; Switzerland, 110; Greece, 97; Portugal, 70.

A horse lives 25 years and weighs 1,000; an omnibus or street car horse lasts from 4 to 6 years. The society for eating horse-flesh, founded at Paris in 1866, consumes oves 2 million pounds of horse-flesh yearly, at a cost of 5 cents per pound, the average yield of meat being 450 pounds per horse.

HORSES. POWER OF Can carry his rider and equipments, say 225 pounds, 25 miles in a day of say 8 hours, on a long journey.

The ordinary work of a horse may be stated at 22,000 pounds, raised 1 foot in a minute, for 8 hours a day.

In a horse-mill a horse moves at the rate of 3 feet in a second. The diameter of the track should not be less than 25 feet.

The strength of a horse is equal to that of 5 men.

The strength of an ass is equal to that of 2 men.

In plowing 2 horses exert a force of 150 pounds.

One horse can draw with a force of 200 pounds for 8 hours at a speed of 2½ miles per hour, or 240 pounds for 6 six hours at the same speed.

One horse can draw more up a steep hill than 3 men can carry, that is from 450 pounds to 760 pounds.

See *Live Stock*; also Diagram, page 43.

HORSES. Best Racing Records, see *Fast Time.*

HORSE-POWER. One horse-power will raise 10 tons per minute a height of 12 inches, working 8 hours a day. This is about 5,000 foot-tons daily, or 12 times a man's work.

Four mail coach horses will draw a coach weighing 2 tons at the rate of 10 miles an hour for 6 days every week, and last 5 years. A canal horse will draw a barge of 25 tons, resistance 108 lbs, at 2½ miles per hour. A common cart horse will easily draw a ton 30 miles in a day of 12 hours.

The horse-power of Niagara is 3¼ million nominal, equal to 10 million horses effective, and valued at 75 millions dollars per annum if conveyed by electricity to New York. See *Electricity.* See Diagram, page 39.

HOSIERY and Knit Goods. There are 359 establishments in the United States; employing 28,885 hands; capital, $15,579,591; producing, in dozens, 288,111 woolen half-hose, 1,216,274 woolen hose, 627,234 mixed half-hose, 2,653,099 mixed hose, 2,491,243 cotton hosiery, 2,671,712 shirts and drawers, 41,683 leggins, 48,462 gloves. 199,889 mittens, 43,310 gaiters, 64,830 hoods, 47,178 scarfs, 20,745 wristers, 105,321 cardigan jackets, 58,522 fancy jackets, 72,050 nubias, 12,389 ulsters, 49,545 shawls, 19,868 fancy knit goods, 925 sacques, 2,800 waists, 62 skirts, 453,350 yards boot and shoe lining, 1,550 coverlets, and 195,000 lbs. woolen yarn; total value, $29,167,227.

HOUSE of Representatives. See *Congress.*

HOUSES. See *Dwellings.*

HURDLE RACING. See *Fast Time.*

ICE. In 1886, 39,570 tons of ice were exported from the United States, valued at $86,277. Norway exports 160 thousand tons yearly. The specific gravity of ice is 17 per cent. greater than water. A cubic foot of ice weighs 8 lbs. more than water. See *Gravity.*

Its strength at various thicknesses is: Good clear ice 2 inches will bear men to walk on, 4 inches will bear horses and riders, 6 inches will bear horses and teams with moderate loads, 8 inches will bear horses and teams with the heaviest loads, ten inches will sustain pressure of 1,000 pounds per square foot.

IDIOTS. See *Asylums.*

ILLEGITIMACY. The percentage of illegitimate births for various countries is: Austria, 12.9; Denmark, 11.2; Sweden, 10.2; Scotland, 8.9; Norway, 8.05; Germany, 8.04; France, 7.02; Belgium, 7.0; United States, 7.0; Italy, 6.8; Spain and Portugal, 5.05; Canada, 5.0; Switzerland, 4.6; Holland, 3.5; Russia, 3.1; Ireland, 2.3; Greece, 1.6.

ILLITERACY. The proportion unable to read or write in the various countries is: Argentine Republic, 83; Austria, 49; Bavaria, 7; Belgium, 30; China, 50; England, 33; France, 30; Germany, 12; Greece, 82; Hungary, 51; India, 95; Ireland, 46; Italy, 73; Japan, 10; Mexico, 93; Netherland, 18; Poland, 91; Russia, 91; Scotland, 16; Spain, 80.

The United States Census (1880) enumerates 36,761,607 persons of ten years of age and upward; of this number 4,923,451, or 13.4 per cent., are returned as unable to read, and 6,239,958, or 17 per cent., are returned as unable to write. The following States of the United States show over 40 per cent. unable to write: Alabama, 60; Florida, 43; Georgia, 50; Louisiana, 49; Mississippi, 50; New Mexico, 65; North Carolina, 48; South Carolina, 55; Virginia, 41; and the following States show less than 5 per cent. unable to read: Connecticut, 4; Dakota, 3; Illinois, 4; Indiana, 5; Iowa, 2; Kansas, 4; Maine, 4; Michigan, 4; Minnesota, 4; Montana, 5; Nebraska 2½; New Hampshire, 4; New Jersey, 5; New York, 4; Ohio, 4; Oregon, 4; Pennsylvania, 5; Utah, 5; Vermont, 5; Wisconsin, 4; Wyoming, 5.

IMMIGRATION. Prior to the year 1820 no official records of alien passengers were kept. It is estimated, however, that the total number arrived in the United States from the foundation of the Government to the year 1820 was 250,000. It has been estimated that prior to the year 1856 about 98 per cent. of the total aliens arrived were immigrants. The total immigration from 1820 to 1887, inclusive, is shown by the following table:—

Year.	Total Alien Passengers.	Year.	Total Alien Passengers.	Year.	Total Immigrants	Year.	Total Immigrants.
1820	8,385	1838	38,914	1856	195 857	1873	459,803
1821	9,127	1839	68,069	1857	246,945	1874	313,339
1822	6,911	1840	84,066	1858	119,501	1875	227,498
1823	6,354	1841	80,289	1859	118,616	1876	169,986
1824	7,912	1842	104,565	1860	150,237	1877	141,857
1825	10,199	1843	52,496	861	89,724	1878	138,469
1826	10,837	1844	78,615	1862	89 007	1879	177 826
1827	18,875	1845	114,371	1863	174,524	1880	457,257
1828	27,382	1846	154,416	1864	193,195	1881	669 431
1829	22,520	1847	234,968	1865	247,453	1882	788,992
1830	23,322	1848	226,527	1866	167,757	1883	603,322
1831	22,633	1849	297,024	Fiscal Yr. ending June 30		1884	518 592
1832	60,482	1850	369,980	1867	298 967	1885	395,346
1833	58 640	1851	379,466	1868	282,189	1886	334 203
1834	65,365	1852	371,603	1869	352,768	1887	490,109
1835	45,374	1853	368 645	1870	387,203	1888	546,889
1836	76,242	1854	427 833	1871	321,350		
1837	79,340	1855	200,877	1872	404,806	Total	14,485,642

The nationality of immigrants to the United States in the year ending June 30, 1886, was as follows: German, 84,403; Irish, 49,619; English, 50,803; Scotch, 12,126; Swedish, 27,751; Italian, 21,315; Norwegian, 12,359; Danish, 6,225; Swiss, 4,805; French, 3,318; European, not classified, 57,404; all others, 5,668. Of the whole number of immigrants arrived in the above-named period, 266,370 came through the customs district of New York, 25,046 through Boston, and 20,822 through Philadelphia.

The records at Castle Garden, New York, for the year ending December 31, 1886, show that 300,918 immigrants landed at the port of New York during that period, being 19,748 more than in 1885. Early in the year there was a falling off, but in June an increase began which was afterward maintained. The figures for each month were: January, 7,209; February, 7,776; March, 20,023; April, 36,289; May, 41,370; June, 35,950; July, 24,434; August, 25,267; September, 30,086; October, 30,919; November, 24,670; December, 16,735.

Australia has expended $42,150,000 in promoting immigration. The estimated value of an able-bodied immigrant, male or female, is: In the United States, $1,230; Buenos Ayres, $1,260; Australia, $1,300. The remittances by Irish settlers in the United States to their friends in Ireland, between 1851 and 1881, amounted to $122,500,000.

It is generally believed that nearly one-half of all the Chinese who have arrived in the United States have returned to their native country. The Democratic Conventions of California, Illinois, and Oregon, and the Republican Conventions of California, Michigan, and Oregon, of 1886, opposed Chinese immigration. The Census of 1880 shows 105,613 Chinese in the United States—an increase of 66,73 per cent. over that of 1870. The following table shows the Chinese immigration for each calendar year from 1855 to 1885, inclusive:—

Year.	No.	Year.	No.	Year.	No	Year.	No
1855	3,526	1863	7,214	1871	6,039	1879	9,189
1856	4,733	1864	2,795	1872	10,642	1880	7,011
1857	5,944	1865	2,942	1873	18,154	1881	20,727
1858	5,128	1866	2,385	1874	16,651	1882	35,614
1859	3,457	1867	3,863	1875	19,033	1883	381
1860	5,467	1868	10,684	1876	16,679	1884	84
1861	7,518	1869	14,902	1877	10,379	1885	14
1862	3,633	1870	21 943	1878	8,468	Total	574 399

IMPORTS. The tables following show a comparative statement of United States imports for fiscal years 1884 to 1886, and imports of specie 1885 and 1886:

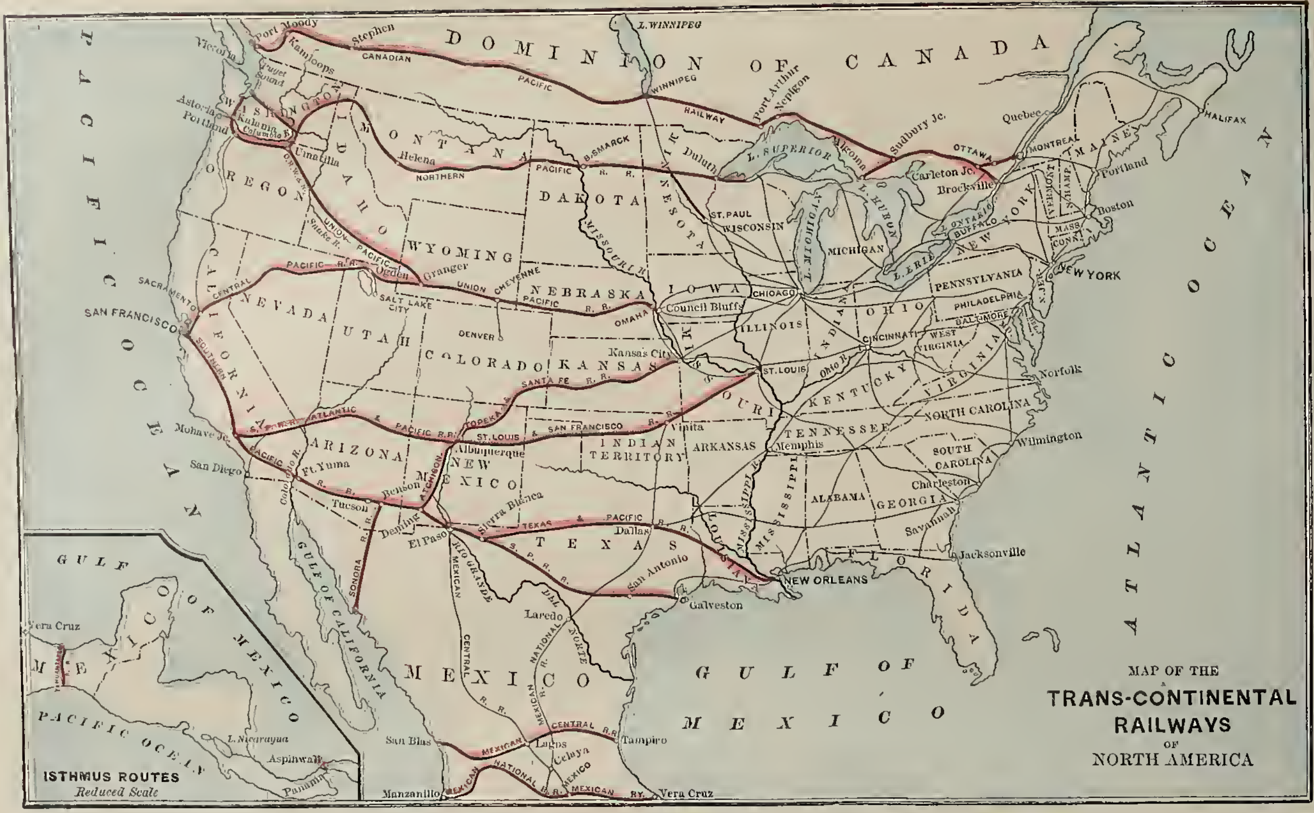
COMPARATIVE STATEMENT, IMPORTS OF FISCAL YEARS 1886 to 1890.

	1888	1889.	1890.
Total Value of Merchandise Imported	$723,957,114	$745,131,652	$789,310,409
Total Value of Coin and Bullion Imported	59,337,986	28,963,073	33,976,326
Aggregate	$783,295,100	$774,094,725	$823,286,735
Merchandise brought in American Vessels	$123,525,298	$120,782,910	$121,948,148
Merchandise brought in Foreign Vessels	568,222,757	586,120,881	623,740,160
Merchandise brought in Land Vehicles	32,209,159	38,227,861	40,621,361
Aggregate	$723,957,114	$745,131,652	$789,310,409

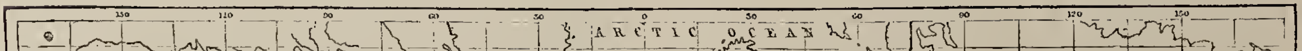
SUMMARY OF SPECIE IMPORTS.

Gold.	1889.	1890.	Silver.	1889.	1890.
Gold Bars and Bullion	$1,705,150	$2,391,395	Silver Bars and Boullion	$5,713,049	$7,085,604
Coin—American	1,403,619	1,949,552	Silver Coin—American	277,313	206,773
Coin—Foreign	7,175,789	8,602,395	Silver Coin—Foreign	12,687,873	13,976,326
Total	10,284,848	12,9133,342	Total	18,678,215	21,268,703

	1888.	1889.	1890.
Aggregate Imports—Gold, Silver, Coin and Bullion:	$359,337,986.	$28,963,073	$34,212,045.

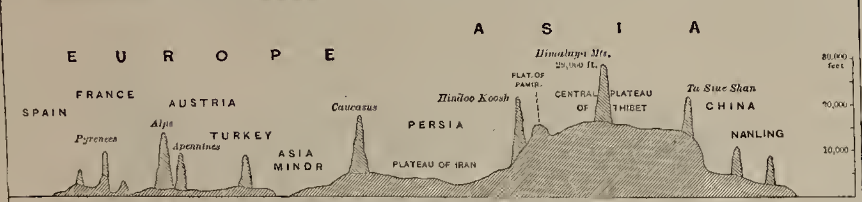

MAP OF THE
TRANS-CONTINENTAL RAILWAYS
OF
NORTH AMERICA

DOMINION OF CANADA
CANADIAN PACIFIC RAILWAY
NORTHERN PACIFIC R. R.
UNION PACIFIC R. R.
CENTRAL PACIFIC R. R.
SANTA FE R. R.
ATLANTIC & PACIFIC R.R.
ST. LOUIS & SAN FRANCISCO R.R.
TEXAS & PACIFIC R. R.
S. P. R. R.
MEXICAN CENTRAL R.R.
MEXICAN NATIONAL R.R.
PACIFIC OCEAN
ATLANTIC OCEAN
GULF OF MEXICO
GULF OF CALIFORNIA
L. WINNIPEG
L. SUPERIOR
L. MICHIGAN
L. HURON
L. ERIE
L. ONTARIO
Port Moody
Stephen
Victoria
Kamloops
Puget Sound
Astoria
Portland
Kalama
Columbia R.
Umatilla
WINNIPEG
Port Arthur
Nepigon
Duluth
Sudbury Jc.
Quebec
OTTAWA
MONTREAL
HALIFAX
Carleton Jc.
Brockville
Portland
Boston
NEW YORK
PHILADELPHIA
BALTIMORE
Norfolk
Wilmington
Charleston
Savannah
Jacksonville
NEW ORLEANS
Galveston
Helena
BISMARCK
ST. PAUL
CHICAGO
Council Bluffs
OMAHA
Kansas City
ST. LOUIS
CINCINNATI
Memphis
Vinita
Ogden
Granger
SALT LAKE CITY
CHEYENNE
DENVER
SACRAMENTO
SAN FRANCISCO
Mohave Jc.
San Diego
Ft. Yuma
Tucson
Benson
Deming
El Paso
Sierra Blanca
Albuquerque
Dallas
San Antonio
Laredo
San Blas
Lagos
Celaya
Manzanillo
Tampico
Vera Cruz
WASHINGTON
OREGON
IDAHO
MONTANA
DAKOTA
MINNESOTA
WISCONSIN
MICHIGAN
WYOMING
NEBRASKA
IOWA
ILLINOIS
INDIANA
OHIO
PENNSYLVANIA
NEW YORK
VERMONT
N. HAMP.
MAINE
MASS.
CONN.
N. JER.
WEST VIRGINIA
VIRGINIA
KENTUCKY
TENNESSEE
NORTH CAROLINA
SOUTH CAROLINA
GEORGIA
ALABAMA
MISSISSIPPI
LOUISIANA
FLORIDA
ARKANSAS
INDIAN TERRITORY
MISSOURI
KANSAS
COLORADO
UTAH
NEVADA
CALIFORNIA
ARIZONA
NEW MEXICO
TEXAS
MEXICO
RIO GRANDE
ISTHMUS ROUTES
Reduced Scale
Vera Cruz
L. Nicaragua
Aspinwall
Panama
PACIFIC OCEAN
GULF OF MEXICO

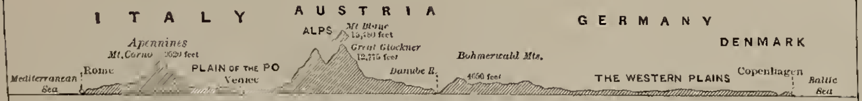

TIDAL CHART
OF
THE WORLD
SHOWING THE PROGRESS OF THE WAVE OF HIGH WATER,
and the
HOUR OF HIGH WATER IN GREENWICH TIME
AT NEW AND FULL MOON
The figures on the wave lines, indicate the time of high water.

ARCTIC OCEAN
RUSSIAN AMERICA
BRITISH AMERICA
GREENLAND
Arctic Circle
Iceland
HUDSON BAY
British Isles
EUROPE
RUSSIAN EMPIRE
SIBERIA
ASIA
TARTARY
SEA OF OKHOTSK
SEA OF JAPAN
NORTH AMERICA
UNITED STATES
Newfoundland
NORTH ATLANTIC OCEAN
MEDITERRANEAN SEA
BLACK SEA
AFRICA
ARABIA
RED SEA
INDIA
CHINA
CHINA SEA
Philippine Is.
NORTH PACIFIC OCEAN
MEXICO
GULF OF MEXICO
West Indies
CARIBBEAN SEA
Sandwich Is.
C. Blanco
C. Verd Is.
Tropic of Cancer
EQUATOR
GUIANA
SOUTH AMERICA
Galapagos
Marquesas
SOUTH PACIFIC OCEAN
SOUTH ATLANTIC OCEAN
Ascension
St. Helena
Tropic of Capricorn
C. of Good Hope
Madagascar
INDIAN OCEAN
Borneo
Java
New Guinea
AUSTRALIA
New Caledonia
New Zealand
Van Diemens Land
PATAGONIA
Cape Horn
ANTARCTIC OCEAN
Meridian of 0 Greenwich

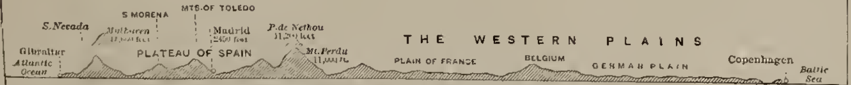
ELEVATIONS OF THE WORLD IN SECTIONS.


E U R O P E
A S I A
SPAIN
FRANCE
Pyrenees
Alps
AUSTRIA
Apennines
TURKEY
ASIA MINOR
Caucasus
PERSIA
PLATEAU OF IRAN
Hindoo Koosh
PLAT. OF PAMIR.
Himalaya Mts.
29,000 ft.
CENTRAL PLATEAU OF THIBET
Ta Siue Shan
CHINA
NANLING
30,000 feet
20,000
10,000

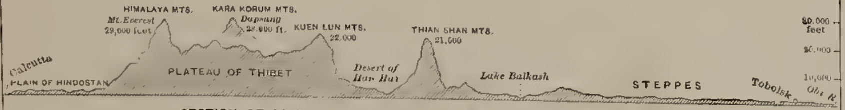
SECTION OF THE OLD WORLD FROM EAST TO WEST


I T A L Y
A U S T R I A
G E R M A N Y
DENMARK
Mediterranean Sea
Rome
Apennines
Mt. Corno 9520 feet
PLAIN OF THE PO
Venice
ALPS
Mt Blanc 15,780 feet
Great Glockner 12,775 feet
Danube R.
Bohmerwald Mts.
4650 feet
THE WESTERN PLAINS
Copenhagen
Baltic Sea

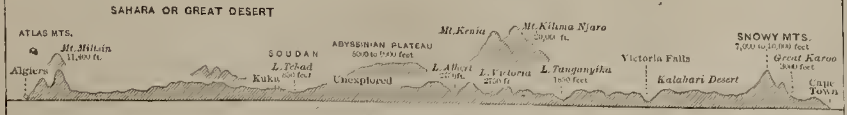
SECTION OF EUROPE FROM ROME TO COPENHAGEN


S. Nevada
S MORENA
Gibraltar
Atlantic Ocean
MTS. OF TOLEDO
Madrid
2450 feet
PLATEAU OF SPAIN
P. de Nethou
11,200 feet
Mt. Perdu
11,000 ft.
T H E W E S T E R N P L A I N S
PLAIN OF FRANCE
BELGIUM
GERMAN PLAIN
Copenhagen
Baltic Sea

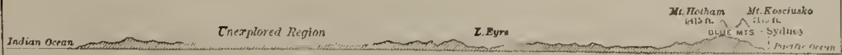
SECTION OF EUROPE FROM GIBRALTAR TO COPENHAGEN


Calcutta
PLAIN OF HINDOSTAN
HIMALAYA MTS.
Mt. Everest
29,000 feet
KARA KORUM MTS.
Dapsang
28,000 ft.
KUEN LUN MTS.
22,000
PLATEAU OF THIBET
Desert of Han Hai
THIAN SHAN MTS.
21,000
Lake Balkash
STEPPES
Tobolsk
Obi R.
30,000 feet
20,000
10,000

SECTION OF ASIA FROM CALCUTTA TO THE MOUTH OF THE OBI R.

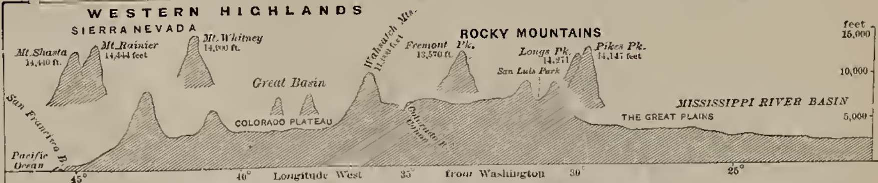

SAHARA OR GREAT DESERT
ATLAS MTS.
Mt. Miltsin
11,400 ft.
Algiers
SOUDAN
Kuku
L. Tchad
850 feet
ABYSSINIAN PLATEAU
6000 to 9000 feet
Unexplored
L. Albert
Mt. Kenia
Mt. Kilima Njaro
20,000 ft.
L. Victoria
2750 ft.
L. Tanganyika
1850 feet
Victoria Falls
Kalahari Desert
SNOWY MTS.
7,000 to 10,000 feet
Great Karoo
3000 feet
Cape Town

PROFILE SECTION OF AFRICA

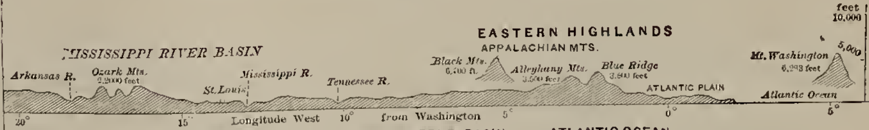

Indian Ocean
Unexplored Region
L. Eyre
Mt. Hotham
Mt. Kosciusko
BLUE MTS
Sydney
Pacific Ocean

PROFILE SECTION OF AUSTRALIA

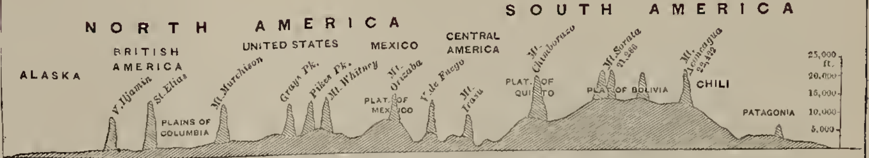
ELEVATIONS OF THE WORLD IN SECTIONS.


WESTERN HIGHLANDS
SIERRA NEVADA
Mt. Shasta
14,440 ft.
Mt. Rainier
14,444 feet
Mt. Whitney
14,900 ft.
San Francisco B.
Pacific Ocean
Great Basin
COLORADO PLATEAU
Wahsatch Mts.
11,000 feet
Colorado R. Canon
ROCKY MOUNTAINS
Fremont Pk.
13,570 ft.
Longs Pk.
14,271
San Luis Park
Pikes Pk.
14,147 feet
MISSISSIPPI RIVER BASIN
THE GREAT PLAINS
feet 15,000
10,000
5,000
45°
40°
Longitude West
35°
from Washington
30°
25°

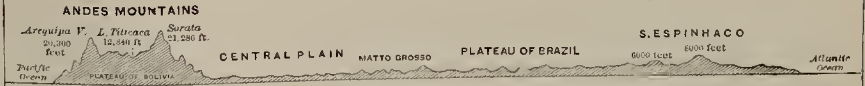
SECTION of U. S. from SAN FRANCISCO to the MISSISSIPPI R. BASIN


MISSISSIPPI RIVER BASIN
Arkansas R.
Ozark Mts.
2,000 feet
St. Louis
Mississippi R.
Tennessee R.
EASTERN HIGHLANDS
APPALACHIAN MTS.
Black Mts.
6,700 ft.
Alleghany Mts.
3,500 feet
Blue Ridge
3,800 feet
ATLANTIC PLAIN
Mt. Washington
6,293 feet
Atlantic Ocean
feet 10,000
5,000
20°
15°
Longitude West
10°
from Washington
5°
0°
5°

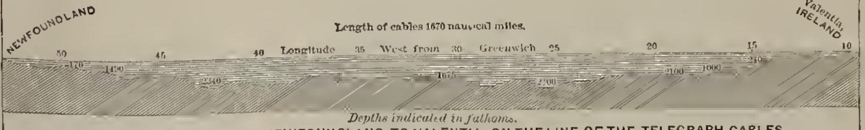
SECTION of U. S. from MISSISSIPPI R. BASIN to the ATLANTIC OCEAN


NORTH AMERICA
SOUTH AMERICA
ALASKA
BRITISH AMERICA
V. Iljamin
St. Elias
PLAINS OF COLUMBIA
Mt. Murchison
UNITED STATES
Grays Pk.
Pikes Pk.
Mt. Whitney
MEXICO
Mt. Orizaba
PLAT. OF MEXICO
V. de Fuego
CENTRAL AMERICA
Mt. Irasu
Mt. Chimborazo
PLAT. OF QUITO
Mt. Sorata
21,286
PLAT. OF BOLIVIA
Mt. Aconcagua
22,422
CHILI
PATAGONIA
25,000 ft.
20,000
15,000
10,000
5,000

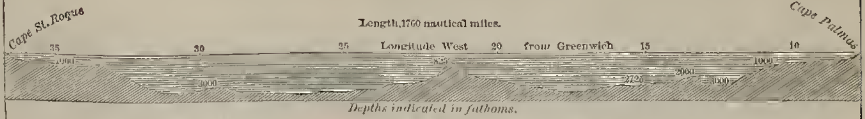
THE NEW WORLD FROM NORTH TO SOUTH


ANDES MOUNTAINS
Arequipa V.
20,300 feet
L. Titicaca
12,840 ft.
Sorata
21,286 ft.
Pacific Ocean
PLATEAU OF BOLIVIA
CENTRAL PLAIN
MATTO GROSSO
PLATEAU OF BRAZIL
S. ESPINHACO
6000 feet
6000 feet
Atlantic Ocean

PROFILE SECTION OF SOUTH AMERICA FROM EAST TO WEST


NEWFOUNDLAND
Length of cables 1670 nautical miles.
Valentia, IRELAND
50
45
40
Longitude
35
West from
30
Greenwich
25
20
15
10
170
1490
2340
1675
2100
2100
1000
210
Depths indicated in fathoms.

THE ATLANTIC BASIN FROM NEWFOUNDLAND TO VALENTIA, ON THE LINE OF THE TELEGRAPH CABLES.


Cape St. Roque
Length, 1760 nautical miles.
Cape Palmas
35
30
25
Longitude West
20
from Greenwich
15
10
1000
3000
825
2725
2000
3000
1000
Depths indicated in fathoms.

THE ATLANTIC BASIN FROM CAPE ST. ROQUE, BRAZIL, TO CAPE PALMAS, WESTERN AFRICA

IMPORTS OF COUNTRIES. See Diagram, page 23.

INCOME OF NATIONS. See *Earnings of Nations.*

INDIANS. The following are the chief tribes of the United States, and number in each: Apaches, 14,349; Choctaws, 16,000; Cherokees, 17,000; Muskogees, 13,000; Seminoles, 2,500; Chickasaws, 6,000; Osages, 4,000; Peoria, 170; Ottawas, 175; Sacs and Foxes, 700; Quapaws, 236; also a collection of tribes in Oregon, nearly 837, and a small remnant of the Oneidas in Wisconsin. The number of Indians who exercise the right of suffrage in the United States is about 25,000. The expenditures of the United States on account of Indians in 1886 was $6,099,158; a total expenditure since 1789 of $229,846,399.

The Indians included in the census of the United States for 1890, 32,567 in number, were those reckoned as civilized, or outside of tribal organizations. Indians not taxed are by law excluded from the census. Estimates of their numbers vary widely—from 200,000 to 350,000 (the latter as estimated in the census of 1870), while the latest census or estimate of the Indian agencies, as reported in 1890 to the Superintendent of the Census, gives 216,796 Indians, excluding Alaska. The Indian Territory is estimated to contain 100,000 to 112,000 inhabitants. The inhabitants of Alaska are not included in the above total. The census of Alaska in 1890 showed: Whites, male, 3,922. females, 497; Black, males, 82; Mixed, males, 770, females, 798; Native, males 7,158, female, 6,557; Chinese, Male, 2125. Total, 21,929.

INDIAN SCHOOLS. See *Schools.*

INDIANS IN CANAOA.

Locality.	Population.	Property.	Average Per Head.
Ontario	16,000	$9,840,000	$615
Quebec	11,000	1,815,000	165
Manitoba, etc.	75,400		

INDIAN WARS. The following are the chief Indian Wars:—

1676—King Phillip.
1704—Deerfield, Mass., fired.
1708—Haverbill, Mass., fired. Hannah Dustan captured and escaped.
1713—The Tuscaroras expelled from North Carolina.
1755—Defeat of Braddock by the French and Indians.
1763—Conspiracy of Pontiac.
1778—Massacre at Wyoming, Penn., and village of Wilkesbarre, burned.
1794—Treaty with the Six Nations.
1804—Treaty with the Delawares.
1811—Defeat of the Indians by Gen. Harrison at Tippecanoe.
1813-14—Creek War in Florida.
1818—The Seminole War.
1832—Black Hawk Wars. Major Stillman with 272 volunteers defeated, May 14th. Indians were defeated Aug. 2.
1835-42—Seminole War in Florida.
1837—Capture of Osceola.
1855—Rogue River Indians defeated.
1856—War against Indians in territories of Oregon and Washington.
1862—War and massacre in Minnesota.
1864—Chivington massacre near Fort Lynn. Indians of both sexes and all ages, numbering over 500, put to death, Nov. 29.
1873—Peace Commissioners Gen. Canby and Rev. E. Thomas traitorously killed by the Modocs April 11; Captain Jack, Schonchin, jr., Boston Charley and Black Jim, murderers of the Peace Commissioners, were executed Oct. 3
1876—Sioux War, in which Gen. Custer and nearly all of his command were defeated and killed on the Big Horn river June 25.
1885—There were about 75 settlers killed by Apache Indians in Arizona.
1886—Capture of the Apaches, and their removal to Florida.
1890-1—War with the Sioux, Sitting Bull killed.

INDUSTRIAL PROGRESS. The following table prepared by the Baltimore *Manufacturer's Record* exhibits the amount of capital and capital stock represented by new industrial enterprises in the South, and the enlargement of old plants in 1885 and 1886, and shows an increase in one year of $62,400,000 in capital and capital stock.

	1886.	1885.		1886	1885.
Alabama	$19,848,000	$7,841,000	North Carolina	$3,676,000	$3,230,000
Arkansas	15,240,000	1,220,000	South Carolina	1,208,000	856,000
Florida	1,659,000	2,019,000	Tennessee	21,240,000	2,692,000
Georgia	3,599,000	2,500,000	Texas	5,694,000	3,232,000
Kentucky	28,404,000	18,303,200	Virginia	8,514,000	3,314,000
Louisiana	2,240,000	2,118,500	West Virginia	8,365,000	12,056,000
Maryland	8,765,000	6,068,800			
Mississippi	774,000	761,500	Total	$129,226,000	$66,812,000

Included in the list of new enterprises reported in the South during 1886 were: 28 iron furnaces, 50 ice factories, 68 foundries and machine shops, many of them of large size, 1 Bessemer steel rail mill, 26 miscellaneous iron works, including iron pipe works, bridge and bolt works, etc.; 8 stove foundries. 24 gas works, 34 electric light companies, 11 agricultural implement factories, 174 mining and quarrying enterprises, 16 carriage and wagon factories, 9 cotton mills, 23 furniture factories, 42 water works, 58 tobacco factories, 92 flour mills, 448 lumber mills (not counting small portable saw mills), including saw and planing mills, sash and door factories, stave, handle, shingle, hub and spoke, shuttle block factories, etc., in addition to which there was a large number of miscellaneous enterprises.

INDUSTRIES. The Industrial trade of the world is shown in the following table, in million dollars:—

	Commerce.	Manufacturers, etc.	Agriculture	Transportation.	Banking.	Total.
United States	1,505	4,800	3,000	830	260	10,395
Great Britain	3,460	4,115	1,200	805	540	10,320
France	1,660	2,485	2,000	310	170	6,625
Germany	1,920	2,240	1,700	315	140	6,345
Russia	955	1,200	1,850	220	75	4,300
Austria	700	1,065	1,315	120	85	3,285
Italy	480	585	725	75	30	1,895
Spain and Portugal	255	530	670	65	20	1,540
Belgium	515	465	175	40	15	1,210
Holland	550	210	230	25	75	1,090
Turkey and Greece	315	340	235	30	15	935
Australia	415	95	260	15	50	865
Canada	175	230	300	45	20	770
Scandinavia	180	210	260	75	15	740
Denmark	95	90	135	10	5	335
Other Countries	535	185	435	30	25	1,210

In the above table manufactures includes mining. See Diagram, page 39.

AVAILABLE POWER FOR INDUSTRIES (MULHALL).

Countries.	Thousands.					Ratio.
	Human Workers.	Horses.	Steam, Horse-Power.	Rivers, Horse-Power.	Total, Horse-Power.	
United States	30,116	11,202	8,152	61,150	83,516	36.0
Great Britain	22,570	2,906	7,780	4,520	17,406	7.5
France	27,765	2,833	3,513	6,130	15,253	6 6
Germany	30,074	3,360	4,325	6,040	16,735	7 2
Russia	49,520	16,200	1,365	36,115	58,630	25 0
Austria	25,008	3,760	1,280	5,830	13,370	5 7
Italy	18,310	658	480	3,960	6,929	2 9
Spain	11,120	590	483	2,220	4,405	1.8
Portugal	2,780	70	66	640	1,054	0 5
Belgium	3,776	283	595	370	1,626	0 7
Holland	2,690	280	216	640	1,405	0 6
Scandinavia	5,810	970	416	6,360	8,327	3 6
Switzerland	1,815	110	253	650	1,195	0 5
Roumania	3,520	550	90	1,160	2,152	0 9
Servia	1,070	140	35	450	732	0 3
Greece	1,020	97	20	420	610	0 2
Total	236,261	44,009	29,069	136,655	233,435	100 0

All of the above powers may be considered in active use, except the rivers, of which less than one-tenth of the power is turned to any use. See Diagram, *Steam and Horse Power of Nations*, page 39.

INFANTS. The Ratio of population under 5 years of age per 100 inhabitants is as follows:—

England	13.5	Austria	13.2	Sweden	12 6
Scotland	13.0	Italy	13 8	Norway	13 5
Ireland	11 1	Spain	14 2	Greece	14 4
United Kingdom	13.3	Holland	11 3	Brazil	10 8
France	9 8	Belgium	12 1	United States	14 3
Germany	12.7	Denmark	12 5		

The yearly death rate per 1,000 under 5 years, is:—

England	64	Austria	112	Belgium	18
United States	59	Italy	111	Sweden	58
France	76	Spain	106		

The death rate of infants under 12 months is, per cent., as follows:

England	15	Russia	27	Italy	22
Scotland	12	Austria	25	Belgium	15
Ireland	11	Wurtemburg	32	Holland	20
United States	17	Saxony	26	Denmark	14
France	16	Bavaria	31	Sweden	14
Prussia	21	Spain	19	Norway	11

The highest death rate of infants in the world is at Liverpool, where 46 per cent. die before reaching 12 months. The rate at New York is 31 per cent.

INSANITY. The insane of all countries of the world is: Germany, 108,100; France, 93,900; United States (1890) 90,854; England, 81,600; Russia, 80,000; Italy, 44,100; Austria, 35,000; Ireland, 19,500; Scandinavia, 18,100; Spain and Portugal, 13,000; Scotland, 11,600; Belgium and Holland, 10,400; Canada, 7,300; Australia, 4,900; Switzerland, 3,100.

Ratio of Sexes.—Inmates of Asylums.—United States, 53¼ male, 46¾ female; England, 47 male, 53 female; France, 49 male, 51 female; Italy, 56 male, 44 female. Men are more liable to insanity than women, but die faster.

The Causes of Insanity. Hereditary, 24 per cent; drink, 18 per cent; business. 12 per cent; loss, of friends, 11 per cent; sickness, 10 per cent; various, 29 per cent.

The above result is the medium average arrived at on comparing the returns for England, France, Denmark and United States. See *Asylums.*

INSURANCE. Life, Fire and Marine.

Countries.	Life Insurance.			Fire Insurance.	
	No of Policies. (Thousands)	Amount Million $	Average Policy, $	Amount Insured Million $.	Per Inhabitant.
United States	2,170	2,300	2,150	6,450	130
Great Britain	879	2,100	2,300	13,690	390
Germany	797	635	795	15,850	310
France	208	435	2,090	20,280	560
Austria	170	200	1,150	...	...
Canada	48	85	1,740	700	160

British Life Companies show assets 650 millions and total revenue, 97½ million dollars. American companies (1886) 552 million assets and 112 million dollars revenue, total payment to policy holders, 64 million; expenses of management, 22 million; a total expenditure of 86 million dollars. New policies issued in 1886, 1,057,919.

The condition and business of assessment companies is expressed in the following: Number of companies, 415; assets, 10 million; assessments collected, 27 million dollars; income, no report; payments to policy holders, 25 million dollars; new membership, 366,585; died during the year, 13,078; total number of members, 1,838,130; amount insured, $4,108,308,783.

The condition of Fire companies in the United States in 1890 was: Assets $324,704,901; number of these companies, 384 stock, and 226 mutual companies; capital, $22,460,155; Premium and other notes, $78,421,762; Liabilities exclusive of capital $98,716,148; amount of risks written, $16,000,000,000; cash, annual income $148,915,700; Losses incurred, $84,345,369. The assets of English companies in 1881 amounted to 120 million dollars.

4,435 millions of dollars are insured in the various Marine Insurance Companies of the world. The loss of sailing vessels averages 4 per per cent; that of steamers 2½ per cent. per annum.

INTEREST RATES. Interest rates for the United States and Canada are sbown by the following table:—

STATES AND TERRITORIES.	Legal Rate Per Cent.	Rate per Contract Per Cent.	Penalties for Usury.
*Alabama	8	8	Forfeiture entire Interest.
*Arizona	10	Any	No Penalty.
*Arkansas	6	10	Usurious contracts void.
†California	7	Any	No Penalty.
†Colorado	10	10	" "
†Connecticut	6	6	Forfeiture entire Interest.
*Dakota	7	12	" excess "
†Delaware	6	6	" of principal.
†District Columbia	6	10	" entire Interest.
England	5		
†Florida	8	Any	No Penalty.
France	5		
†Georgia	7	8	Forfeiture Interest and excess.
†Idaho	10	18	Forfeit 3 times amount paid; fine $300 or 6 months imprisonment, or both.
†Illinois	5	7	Forfeiture excess Interest.
*Indiana	6	6	" " " and cost.
*Iowa	7	10	" entire "
Ireland	6		
†Kansas	7	12	Any payment above 12 forfeiture ex. Int.
*Kentucky	6	6	Forfeiture excess Interest.
†Louisiana	5	8	Excess above 8, after maturity forfeits interest.
*Maine	6	Any	No Penalty.
†Maryland	6	6	Forfeiture of excess.
*Massachusetts	6	Any	No Penalty.
*Michigan	7	10	Forfeiture of excess.
*Minnesota	7	Any	" "
*Mississippi	6	10	" "
†Missouri	6	10	Lender forfeits entire Interest. Borrower pays 10 per cent. to School Fund.
*Montana	10	Any	
*Nebraska	7	10	Forfeiture entire Interest.
†Nevada	10	Any	" all Interest.
*New Hampshire	6	6	" of 3 times the excess and costs.
*New Jersey	6	6	" entire Interest.
*New Mexico	6	12	
†New York	6	6‡	Voids contract and is misdemeanor.
*North Carolina	6	8	Forfeiture of entire interest. Party paying may recover double the amount paid.
†Ohio	6	8	Forfeiture of excess.
*Oregon	8	10	Forfeiture of principal to common School Fund.
†Pennsylvania	6	6	
*Rhode Island	6	Any	
*South Carolina	7	10	Forfeiture of all Interest.
*Tennessee	6	6	" of excess, fine and imprisonm't
†Texas	8	12	" of all Interest.
*Utah	10	Any	
†Vermont	6	6	" of excess.
†Virginia	6	6	" of all Interest.
*Washington Ter.	10	Any	
†West Virginia	6	6	" of excess.
*Wisconsin	7	10	" of all Interest.
*Wyoming	12	Any	
*Quebec	6	Any	
*Ontario	6	Any	
*New Brunswick	6	Any	
*Nova Scotia	6	Any	

*Three days' grace is allowed on sight drafts. †Grace not allowed on sight drafts.

‡New has by a recent law legalized any rate of interest on call loans of $5,000 or upwards on collateral security.

INTERNAL IMPROVEMENTS. See Diagram, page 43.

INTERNAL REVENUE. The total aggregate United States internal revenue receipts from all sources from 1863 to 1890, inclusive, were $3,966,118,993; of which spirits paid $1,483,876,491, and tobacco $844,464,673. The total receipts in 1890, Distilled Spirits, $1,637,375; Tobacco, $33,958,996,06; Fermented Liquors, $26,008,535,74; Collections not otherwise provided for, $803,074; Penalties, $136,720; total, $142,594,596; against $130,893,484 in 1889.

INVENTIONS. Appended will be found a list of the most important inventions, with name of inventor and date of invention:—

Name of Invention.	Name of Inventor.	Date.
Air Brake	Westinghouse, England	1874
Air Gun	Marin	1595
Air Pump	Otto von Guericke	1654
Anastatic Printing	Baldermus	1841
Anchor	Anacharsis	594 B. C
Anemometer	Wolfius	1709
Balloon	Montgolfier	1783
Barometer	Evangelista Torricelli	1643
Bellows	Anacharsis	593 B. C.
Camel machine	Menvis Meindertzoon Bakker	1688
Camera Lucida	Dr. Hooke (Modern by Wollaston, 1807)	1535–1703
Camera Obscura	Roger Bacon	1297
Cannon	Chinese (Brass Cannon to John Owen), Iron Cannon first cast 1547	About 618 B. C.
Chronoscope	Wheatstone	1840
Clock	First one erected in Padua	11th Century.
Compass	Chinese	1115 B. C.
Cotton Gin	Eli Whitney	1793
Derrick	Bishop's floating first used in England	1850
Dial	Anaximander	550 B. C.
Diving Bell	Unknown	1509
Electric Clock	Wheatstone	1840
Electric Light	Sir Humphrey Davy	1813
Electrotype	Spencer and Jacobi	1837
Engraving	Chinese	1000 B. C.
Fire Arms	Unknown; first made at Perugia, Italy	1364
Fire Engine	Hautsch	1657
Gas	Van Helmont	1600 1625
Gas Meter	Clegg	1815
Geographical Maps	Anaximander	550 B. C.
Glass	Phœnecians; first in America 1765	....
Gunpowder	Barthold Schwarz	1320
Hydraulic Press	Joseph Bramah	1796
Hydraulic Ram	Montgolfier	1797
Kaleidoscope	David Brewster	1814
Lightning Conductor	Benjamin Franklin	1752
Lithography	Alois Senefelder	1798
Locomotive	Watt	1759

INVENTIONS. Continued:—

Name of Invention.	Name of Inventor.	Date.
Matches	Walker	1827
Microscope	Zacharias Jansen	1590
Organ	Archimedes and Ctesibius	220-100 B. C
Phonograph	Thomas A. Edison	1877
Photography	Thomas Wedgewood	1802
Piano Forte	Bartolommeo Christofali	1714
Pneumatic Railway	Henry Pinkus	1835
Stocking Frame	William Lee	1589
Printing	Johann Gutenberg	1438
Railroad	Beaumont	1672
Ruling Machine	By a Hollander; subsequently improved by Payne, Woodmason and Brown	1782
Sewing Machine	Elias Howe	1841
Steamboat	Robert Fulton	1807
Steam Engine	James Watt	1763
Telegraph	Samuel F. B. Morse	1837
Torpedo	David Bushnell	1777
Telephone	Elisha Grey, A. Graham Bell, A. C Dolbear, and Thomas A. Edison	1877
Telescope	Hans Lippershelm, Jacob Adriansz	1608
Thermometer	Drebbel, Sanctorius	1609
Watch	Said to have been first invented at Nuremberg, 1477, although it is affirmed that Robert, King of Scotland, had a watch about 1310. The invention of spring watches has been ascribed to Dr. Hooke, and by some to Huyghens, about 1658; the anchor escapement was invented by Clement, 1680; the horizontal watch by Graham, 1724; repeating watches by Barlow in 1676	1477

IRON. See Diagram, page 30.

IRON CLAD FLEETS. The strength of the fleets of the world in 1882 was as follows:—

	Vessels	Tons.	Average Tons.	Plating, Inches. Max.	Guns.	Tonnage of Guns.	Do. per Vessel.
Great Britain	51	375,000	7,400	21	470	7,030	138
France	59	309,000	5,200	21	464	5,695	101
Germany	24	97,000	4,040	10	146	2,155	86
Russia	29	91,000	3,170	18	162	2,424	81
Austria	14	58,000	4,160	13	132	1,420	101
Italy	18	81,000	4,450	36	133	2,195	122
Spain	10	33,000	3,300	6	195	810	81
Turkey	15	61,000	4,070	12	134	1,335	89
Holland	19	34,000	1,800	8	57	622	33
Denmark	7	23,000	3,300	10	63	511	73
Sweden and Norway	18	10,000	550	..	26	104	6
Portugal	3	4,000	1,300	10	31	86	29
United States	24	24,000	990	..	71	...	..
Brazil	9	11,000	1,200	..	45	....	..
Argentine	3	5,000	1,700	..	15	...	
Chilian	3	4,000	1,300	9	22	225	75
Japan	4	11,000	2,800	9	19	244	61
The World	310	1,232,000	3,970	36	2,188	24,755	81

The progress of "iron-clad science" in 30 years has been:—

1854. Gunboats built for Crimean war, 4-inch plates, perfectly shot proof.

1862. Merrimacs and Monitors used in American war.

1873. English rifle cannon send 200 lb. shots, 9-ton guns, through 8-inch plates.

1874. Plates of 10 inches pierced in like manner.

1876. Armstrong 100-ton guns broke 22-inch Creusot steel plates.

1879. Shot from 9-inch gun, 75 lbs. powder, unable to pierce a 12-inch plate of iron and seel alternate layers.

1880. Result of Krupp's experiments:—

Gun.	Inch.	Shot, Lbs.	Penetration.	Foot Tons.
Krupp	9½	348	18.1	8,630
British	11½	612	17.9	12,260

Krupp's shot penetrated 18-inch plates, the British did not.

1882. Italian iron-clad, "Lepanto," has plates 36 inches thick.

IVORY. An ordinary elephant produces 120 lbs., worth $300. England consumes 650 tons (of which Sheffield one-third), for which it is necessary to kill 12,000 elephants yearly. At the exhibition of 1851 there was a tusk of 162 lbs., but Gordon Cumming since got one of 173 lbs.

JESUITS. The number in the various countries in 1882 was: Germany, 2,875; France and Colonies, 2,789; Great Britain and United States, 1,894; Spain and South America, 1,933; Italy, 1558. The General of the Jesuits, May 1, 1886, published the statistics of the order showing that it counts 2,500 missionaries and that it can boast of having 248 saints, 1,500 martyrs, 13 popes, 60 cardinals, 4,000 archbishops and bishops, and 6,600 authors.

JUTE. Jute is manufactured in India at 22 mills, with 6,500 power looms, which turn out 100 million sacks yearly, California taking 20 millions.

KINDERGARTEN SCHOOLS. See *Schools.*

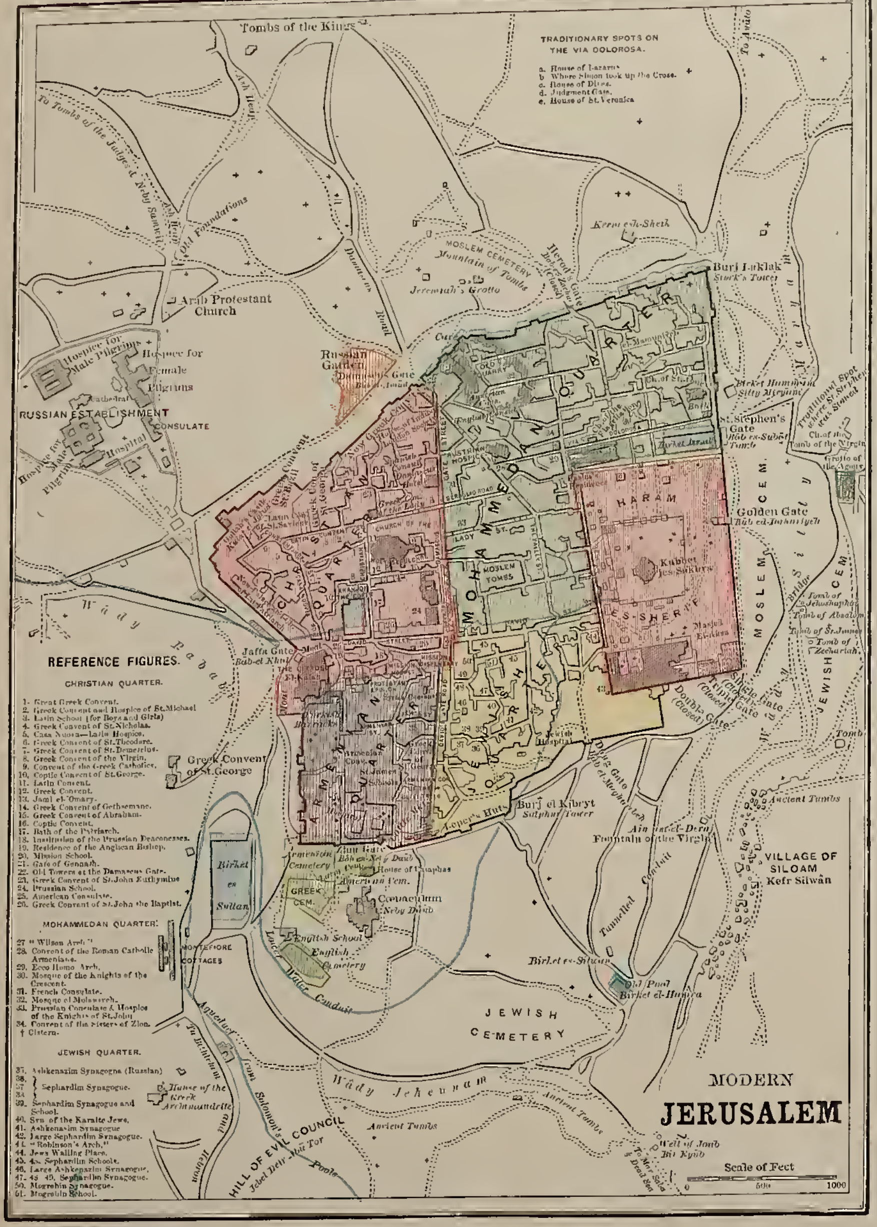
KINGS. In 1883 there were 22 kings including emperors. The number who have ruled in various countries since the battle of Hastings, A. D. 1066, has been as follows:—

	No.	Average Reign, Years.
England	35	23
France	34	21
Germany	39	21
Russia	50	16
Spain	32	26
Denmark	39	21
Sweden	53	17
Turkey	35	17

The average reign of the above 317 monarchs was just 20 years.

The Turkish dynasty dates only from 1299.

KNIT GOODS. See *Hosiery.*



MODERN JERUSALEM

TRADITIONARY SPOTS ON THE VIA DOLOROSA.

a. House of Lazarus
b. Where Simon took up the Cross.
c. House of Dives.
d. Judgment Gate.
e. House of St. Veronica

REFERENCE FIGURES.

CHRISTIAN QUARTER.

1. Great Greek Convent.
2. Greek Convent and Hospice of St. Michael
3. Latin School (for Boys and Girls)
4. Greek Convent of St. Nicholas.
5. Casa Nuova—Latin Hospice.
6. Greek Convent of St. Theodore.
7. Greek Convent of St. Demetrius.
8. Greek Convent of the Virgin.
9. Convent of the Greek Catholics.
10. Coptic Convent of St. George.
11. Latin Convent.
12. Greek Convent.
13. Jami el-'Omary.
14. Greek Convent of Gethsemane.
15. Greek Convent of Abraham.
16. Coptic Convent.
17. Bath of the Patriarch.
18. Institution of the Prussian Deaconesses.
19. Residence of the Anglican Bishop.
20. Mission School.
21. Gate of Gennath.
22. Old Towers at the Damascus Gate.
23. Greek Convent of St. John Euthymius
24. Prussian School.
25. American Consulate.
26. Greek Convent of St. John the Baptist.

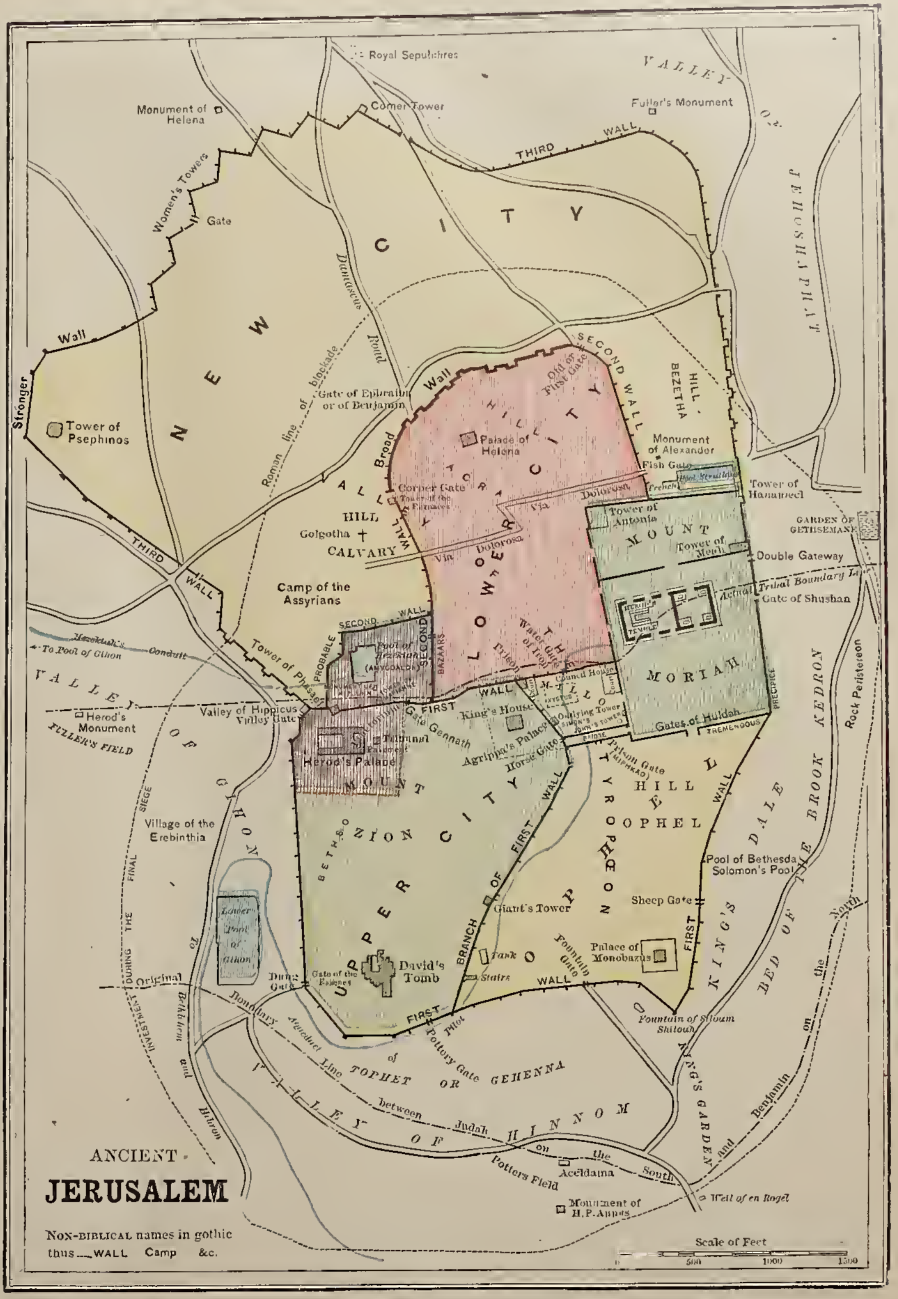
MOHAMMEDAN QUARTER.

27. "Wilson Arch."
28. Convent of the Roman Catholic Armenians.
29. Ecce Homo Arch.
30. Mosque of the Knights of the Crescent.
31. French Consulate.
32. Mosque el Molawiyeh.
33. Prussian Consulate & Hospice of the Knights of St. John
34. Convent of the Sisters of Zion.
† Cistern.

JEWISH QUARTER.

37. Ashkenazim Synagogue (Russian)
38. } Sephardim Synagogue.
37. }
38. }
39. Sephardim Synagogue and School.
40. Syn. of the Karaite Jews.
41. Ashkenazim Synagogue
42. Large Sephardim Synagogue.
43. "Robinson's Arch."
44. Jews Wailing Place.
45. 45. Sephardim Schools.
46. Large Ashkenazim Synagogue.
47. 48. 49. Sephardim Synagogue.
50. Mograbin Synagogue.
51. Mograbin School.

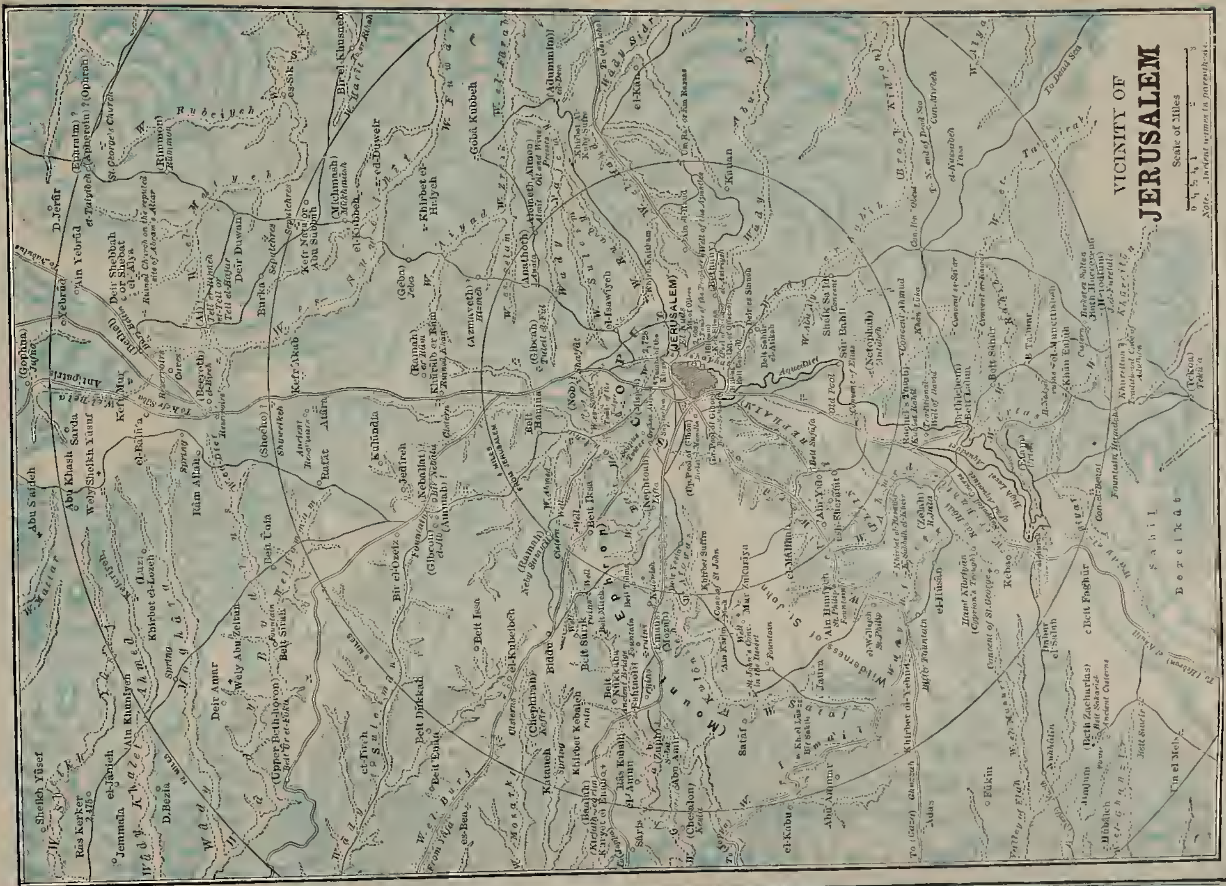
Scale of Feet
0
500
1000
Tombs of the Kings
To Tombs of the Judges & Neby Samwil
Old Foundations
Arab Protestant Church
Hospice for Male Pilgrims
Hospice for Female Pilgrims
Cathedral
RUSSIAN ESTABLISHMENT
CONSULATE
Hospital
Russian Garden
Damascus Road
MOSLEM CEMETERY
Mountain of Tombs
Jeremiah's Grotto
Kerm esh-Sheik
Herod's Gate
Burj Lakluk
Stork's Tower
St. Stephen's Gate
Birket Hammam Sitty Maryam
HARAM
Kubbet es-Sakhra
ES-SHERIF
MOHAMMEDAN QUARTER
CHRISTIAN QUARTER
ARMENIAN QUARTER
JEWISH QUARTER
MOSLEM TOMBS
Golden Gate
Bab ed-Dahariyeh
Tomb of the Virgin
Grotto of the Agony
MOSLEM CEM.
JEWISH CEM.
Tomb of Absalom
Tomb of St. James
Tomb of Zechariah
Double Gate
Single Gate
Dung Gate
Burj el Kibryt
Sulphur Tower
Ain Sitti Miriam
Fountain of the Virgin
VILLAGE OF SILOAM
Kefr Silwân
Ancient Tombs
Jaffa Gate
Bab el Khalil
Wâdy Rabâbi
Greek Convent of St. George
Birket es Sultan
MONTEFIORE COTTAGES
Zion Gate
Armenian Cemetery
Greek Cem.
Cœnaculum
Neby Dâûd
English School
English Cemetery
Lower Water Conduit
Aqueduct from Solomon's Pools
To Bethlehem and Hebron
House of the Greek Archimandrite
HILL OF EVIL COUNCIL
Jebel Deir Abu Tor
Wâdy Jehennam
JEWISH CEMETERY
Birket es-Silwân
Old Pool
Birket el-Hamra
Tunnelled Conduit
Well of Joab
Bir Eyûb
To Mar Saba & Dead Sea
To Anato



ANCIENT JERUSALEM

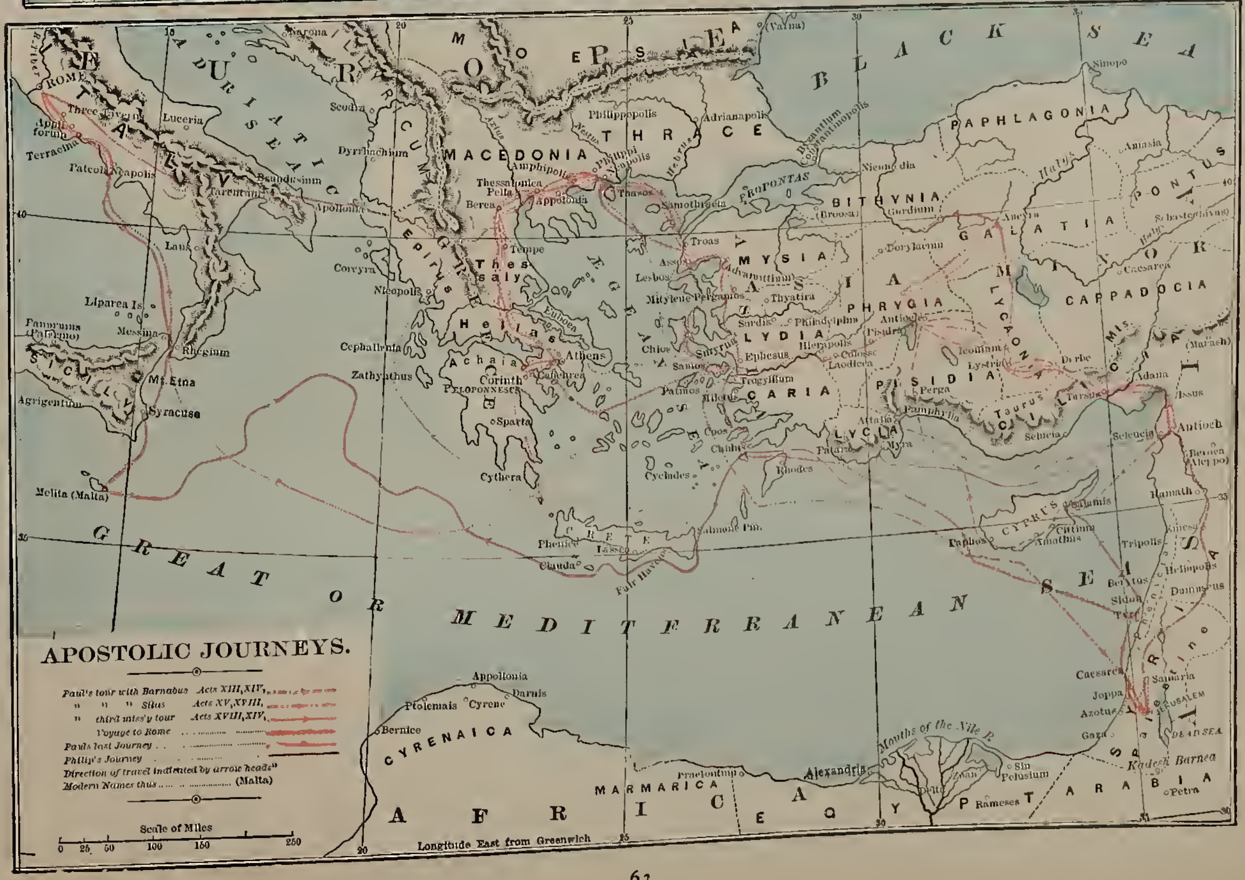
NON-BIBLICAL names in gothic thus WALL Camp &c.

Scale of Feet
500
1000
1500
Royal Sepulchres
Monument of Helena
Corner Tower
Fuller's Monument
VALLEY OF JEHOSHAPHAT
Women's Towers
Gate
NEW CITY
THIRD WALL
Stronger Wall
Tower of Psephinos
Damascus Road
Roman line of blockade
Gate of Ephraim or of Benjamin
Broad Wall
SECOND WALL
HILL BEZETHA
Monument of Alexander
Fish Gate
Tower of Hananeel
GARDEN OF GETHSEMANE
Palace of Helena
Old or First Gate
HILL ACRA
LOWER CITY
Corner Gate
Tower of the Furnaces
Via Dolorosa
Tower of Antonia
MOUNT MORIAH
Tower of Meah
Double Gateway
Actual Tribal Boundary Line
Gate of Shushan
TEMPLE
HILL CALVARY
Golgotha
Camp of the Assyrians
Tower of Phasaelus
Pool of Hezekiah
(AMYGDALON)
BAZAARS
Water Gate of Troops
Prison
Council House
MILLO
Outlying Tower
King's House
Gates of Huldah
PRECIPICE
TREMENDOUS
Gate Gennath
Tribunal
Herod's Palace
Agrippa's Palace
Horse Gate
Prison Gate
HILL OPHEL
TYROPOEON
Valley of Hippicus
Valley Gate
Hezekiah's Conduit
To Pool of Gihon
Herod's Monument
FULLER'S FIELD
VALLEY OF GIHON
Village of the Erebinthia
THE FINAL SIEGE
INVESTMENT DURING
Original Boundary
Lower Pool of Gihon
MOUNT ZION
BETHSO
UPPER CITY
Giant's Tower
Tank
Stairs
Fountain Gate
Palace of Monobazus
Sheep Gate
Pool of Bethesda Solomon's Pool
David's Tomb
Gate of the Essenes
Dung Gate
FIRST WALL
BRANCH OF FIRST WALL
Pottery Gate
Fountain of Siloam Shiloah
KING'S DALE
BED OF THE BROOK KEDRON
Rock Peristereon
KING'S GARDEN
Boundary of Judah and Benjamin on the South
TOPHET OR GEHENNA
VALLEY OF HINNOM
Aceldama
Potters Field
Monument of H.P. Annas
Well of en Rogel
Aqueduct
To Bethlehem and Hebron



VICINITY OF
JERUSALEM

Scale of Miles
0 ¼ ½ ¾ 1 2 3
Note. Ancient names in parenthesis.
JERUSALEM
Mount of Olives
Bethlehem
Wilderness of St. John
Wady
Anathoth
Gibeon
Ramah
Michmash
Geba
Bethel
Nob
To Dead Sea
Jericho Road



APOSTOLIC JOURNEYS.

Paul's tour with Barnabus Acts XIII, XIV,
" " " Silas Acts XV, XVIII,
" third miss'y tour Acts XVIII, XIV,
Voyage to Rome
Pauls last Journey
Philip's Journey
Direction of travel indicated by arrow heads"
Modern Names thus (Malta)
Scale of Miles
0 25 50 100 150 250
Longitude East from Greenwich
ROME
Three Taverns
Appii forum
Terracina
Puteoli
Neapolis
Luceria
Tarentum
Brundusium
Rhegium
Messina
Mt. Etna
Syracuse
Agrigentum
Melita (Malta)
ADRIATIC SEA
MACEDONIA
THRACE
Philippi
Philippopolis
Adrianapolis
Byzantium (Constantinople)
Amphipolis
Thessalonica
Pella
Berea
Apollonia
Dyrrhachium
Scodra
Epirus
Thessaly
Hellas
Achaia
Athens
Corinth
Cenchrea
Sparta
Cythera
BLACK SEA
PAPHLAGONIA
BITHYNIA
Nicomedia
PONTUS
GALATIA
Ancyra
MYSIA
Troas
Assos
Lesbos
Mitylene
Pergamos
Thyatira
LYDIA
Sardis
Philadelphia
Smyrna
Ephesus
Chios
Samos
Patmos
Miletus
CARIA
Rhodes
LYCIA
Myra
Patara
PHRYGIA
Antioch
Pisidia
Colosse
Laodicea
Hierapolis
LYCAONIA
Iconium
Lystra
Derbe
CAPPADOCIA
Caesarea
CILICIA
Tarsus
Adana
Issus
Seleucia
Antioch
Attalia
Perga
Pamphylia
CYPRUS
Salamis
Paphos
Crete
Salmone Pm.
Phenice
Clauda
Fair Havens
GREAT OR MEDITERRANEAN SEA
Tripolis
Heliopolis
Damascus
Sidon
Tyre
Caesarea
Samaria
Joppa
JERUSALEM
Azotus
Gaza
DEAD SEA
Kadesh Barnea
Petra
ARABIA
Alexandria
Mouths of the Nile R.
Pelusium
Rameses
MARMARICA
CYRENAICA
Cyrene
Apollonia
Darnis
Ptolemais
Bernice
AFRICA
EGYPT

LABORER. The estimated value of an agricultural laborer to a state, as made by Dr. Farr is:—

Age.	Value.	Age.	Value.	Age.	Value.
5	$280	30	$1,205	55	$690
10	585	35	1,140	60	485
15	860	40	1,060	65	230
20	1,170	45	965	70	0
25	1,230	50	840		

At the age of 75 he is a loss of $125, and the loss rises to $205 at 80. This is only true of agricultural laborers, since intellectual workers are often of much value after 70 years of age, which balances the account.

LABOR MOVEMENT. The organized labor movement in the United States, with the labor organizations, legislations and Bureaus is as follows:—

PROGRESS OF THE MOVEMENT.

The first strike in this country occurred in New York City in 1803, when a number of sailors struck for an advance of wages.

1806. The tailors this year established the first organization in the United States, in the present form of a trades union.

1819. The hatters organized a union of their craft.

1823-30. The Columbia Charitable Association of Shipwrights and Caulkers was organized.

1825. As early as this year the question of shorter hours of work, better wages and protection of operatives in factories were being agitated, and during the years that immediately followed, social unions of different crafts were springing up in cities and manufacturing centres.

1828. The workingmen's party, a local political organization in New York, Boston, Philadelphia and other cities appeared.

1829. At the State election in New York a workingmen's ticket was put in the field and elected one candidate to the legislature—Ebenezer Ford, of New York.

1831. First local union of printers.

1831. The New England Association of Farmers, Mechanics and Workingmen formed.

1832. Ten-hour movement among the shipwrights and caulkers throughout New England cities was followed by strikes, which proved unsuccessful.

1834. A mechanics' convention met at Utica, N. Y., and protested against convict labor.

1835. From this year onward strikes occurred in the different trades from time to time with varying results.

1840. About this time many trades were organized, and some were enrolled in Labor Reform associations

1840. President Van Buren established the ten-hour system for all employes of the Government in the Navy Yard.

1844-45. First effort of co-operation in connection with the labor movement originated in Boston.

1845. The New England Workingmen's Association was organized in Boston.

1845, October 12. The first Industrial Congress of the United States convened in New York.

1847. New Hampshire passed a law making ten hour's a legal day's work.

1850. The labor agitation at this period was principally directed to a reduction in hours of work by legal enactment. It entered into polities, and many candidates were run on that issue.

1850-60. National and international trades-unions were organized, granting charters to local bodies and organizing new branches from Maine to California.

1861-65. The eight-hour movement obtained great impetus during the war.

1864. The Cigarmakers' International Union was formed.

1865. There was a revival of the labor movement, and many new organizations were formed.

1866. An eight-hour bill for the benefit of Government employes was introduced in Congress, and finally became a law in 1868 by the signature of President Johnson.

1866. First National Labor Congress met at Baltimore, August 20. This body met annually in different cities for several years.

1869. The Knights of Labor were organized in Philadelphia.

The labor movement from 1870 to the present time was a continuous growth in the number of trades unions and increase in their membership, attended by strikes, lockouts and settlements by arbitration, the agitation for labor legislation and efforts at political party organization. Congress created a National Bureau of Labor in 1884.

A convention to form a National Union Labor Party was called to meet at Cincinnati, February 22, 1887, under the auspices of the National Committee of the United Labor Organizations.

PRINCIPAL LABOR ORGANIZATIONS.

Organized.

——. United States Wool Hat Finishers' Association. This is the oldest existing trades union in the United States, the date of its organization (though not under its present name) being uncertain, but it was prior to 1850.

1850. International Typographical Union (printers).

1854. National Silk and Hat Finishers' Association.

1859. International Furniture Workers' Union.

1863. Brotherhood of Locomotive Engineers.

1864. Cigarmakers' International Union.

1864. Order of the Knights of St. Crispin (defunct). The members of this shoemakers' organization have mostly gone into the Knights of Labor.

1865. Journeymen Tailors' National Union.

1865. Bricklayers' and Masons' International Union.

1866. Spinners' Union.

1869. Knights of Labor.

1869. Lasters' Protective Union (last makers).

1870. Telegraphers' National Union.

1876. Amalgamated Association of Iron and Steel Workers of the United States.

1877. Granite Cutters' National Union.

1880. International Brotherhood of Boilermakers and Shipbuilders' Union.

1881. Brotherhood of Carpenters and Joiners.

1885. Journeymen Bakers' National Union.

1885. National Federation of Miners and Mine Laborers of the United States and Territories.

The Amalgamated Engineers (machinists), Metal Workers' National Union, and Iron Moulders' Union are also important organizations. There are numerous smaller trades unions, some of which are independent organizations, and some affiliated with the Knights of Labor, who are numerically the strongest labor organization in the United States.

LABOR LEGISLATION.

Apprenticeship. In many States there are laws relating to apprenticeship, providing for the indenture of children during their minority, and protecting their rights and interests. In most cases the consent of the children themselves must be obtained if they are fourteen years of age or over.

Arbitration. Iowa, Kansas, Massachusetts, New Jersey, New York and Pennsylvania have laws providing for arbitration in disputes between capital and labor.

Eight Hours. California, Connecticut (except on farms and where otherwise agreed), Illinois, New Mexico (in the mines), Pennsylvania and New York (except for farm labor and weekly, monthly or yearly contracts) make eight hours a legal day's work.

Fire Escapes. Fire escapes in factories are required by law in Connecticut, Delaware, Illinois Maine, Massachusetts, Michigan, New Jersey, Ohio and other States.

Workmen's Liens Many States guard the interests of mechanics by giving them liens on the structure and on the interest of the owner of the lot on which it stands, for wages. Farm laborers have liens on crops, shipbuilders on vessels, and lumbermen on lumber. Employes on railroads and steamboats, and persons furnishing supplies have liens on the franchise, gross earnings and real and personal property of the companies operating them, and these liens have the precedence of all other claims.

Women and Children. California, Colorado, Connecticut, Dakota, Georgia, Illinois, Indiana Iowa, Kansas, Maine, Maryland, Massachusetts, Michigan, Minnesota, Missouri, New Hampshire, New Jersey, New York, Ohio, Pennsylvania, Rhode Island, Vermont and Wisconsin have laws restricting in one way or another the hours of labor for women and minors in certain mechanical and mining pursuits In Connecticut children under fifteen can work in mechanical or manufacturing establishments not more than ten hours a day or fifty-eight hours a week. Indiana allows no minors under eighteen to work more than ten hours a day in cotton or woolen factories, and children under twelve must not be employed over eight hours per day. In Michigan children under eighteen and women cannot be required to work more than ten hours a day, or sixty hours a week, and one hour must be allowed for dinner. New Hampshire fixes the limit for minors under fifteen to ten hours; New Jersey, for those under sixteen; Ohio, for those under eighteen, and Pennsylvania for those under twenty-one. Indiana prohibits the employment of children under twelve in the manufacture of iron, steel, nails, metal, machinery, or tobacco; Colorado, under twelve, in the mines: Connecticut, under fourteen, in factories, unless having had twelve weeks' schooling; Illinois and Indiana, under fourteen in the mines; Maine, in factories, unless having had four months' schooling in the year previous; Massachusetts, under twelve in factories during the hours when the public schools are in session; Michigan, under fourteen in factories, unless with three months' schooling in previous year; New York, under fourteen in factories, unless having fourteen weeks' schooling in a previous year, or under eighteen more than sixty hours a week; Ohio, under twelve; Pennsylvania, under twelve in coal mines and thirteen in factories. New Jersey prohibits the employment of boys under twelve and girls under fourteen in factories during school hours.

Miscellaneous. In some States workingwomen must be provided with seats while employed. Railroad companies are forbidden to exact any part of the earnings of their employes for any hospital, reading room, or gymnasium. Employers are required to give due notice before discharging an employe. Workshops must be kept in a good sanitary condition and well lighted and ventilated. Corporations must give thirty days' notice of a reduction of wages, specifying the amount of the same. Employers are prohibited from compelling employes to purchase at stores owned by the former. There are also laws in the mining States to protect miners from accidents by fire and otherwise.

Most of the above statistics have been compiled from a work on "The Labor Movement," edited by George E. McNeill, late Labor candidate for Mayor of Boston, and published by A. M. Bridgman & Co., Boston, 1887.

LIST OF BUREAUS OF LABOR AND LABOR STATISTICS IN THE UNITED STATES.

Title of Bureau.	Where Located.	When Organized.	Chief Officer.	Title.
United States Bureau of Labor	Washington, D. C.	1885	Carroll D. Wright	Commissioner.
Bureau of Statistics of Labor	Boston, Mass.	1869	Horace G. Wadlin	Chief.
Bureau of Industrial Statistics	Harrisburg, Pa.	1872	Albert S. Bolles	Chief.
*Bureau of Labor Statistics	Hartford, Ct	1873	S. M. Hotchkiss	Commissioner.
Bureau of Labor Statistics	Columbus, Ohio	1877	A. D. Fassett	Commissioner.
Bureau of Statistics of Labor and Industries	Trenton, N. J.	1878	James Bishop	Chief.
Bureau of Labor Statistics and Inspection	Jefferson City, Mo.	1879	Oscar Kochtitzky	Commissioner.
Bureau of Labor Statistics	Springfield, Ill.	1879	John S. Lord	Secretary.
Bureau of Statistics	Indianapolis, Ind.	1879	Wm. A. Peelle, Jr.	Chief.
Bureau of Labor Statistics	Albany, N. Y.	1883	Charles F. Peck	Commissioner.
Bureau of Labor Statistics	San Francisco, Cal.	1883	J. J. Tobin	Commissioner.
Bureau of Labor and Industrial Statistics	Lansing, Mich.	1883	A. H. Heath	Commissioner.
Bureau of Labor Statistics	Madison, Wis.	1883	Frank A. Flower	Commissioner.
Bureau of Labor Statistics	Des Moines, Iowa	1884	E. R. Hutchins	Commissioner.
Bureau of Statistics of Labor.	Baltimore, Md.	1884	Thomas C. Weeks	Chief.
Bureau of Labor and Industrial Statistics	Topeka, Kansas	1885	Frank H. Betton	Commissioner.

*Discontinued, 1874; reorganized, 1885.

LAKES. The principal lakes of the world, their length, width and area, in miles, is as follows:

	Length	Width.	Area. Ms.		Length	Width.	Area. Ms.
Superior	420	160	32,100	Maracaybo	150	60	5,300
Michigan	320	80	25,600	Athabasca	250	40	5,000
Huron	280	190	24,000	Titicaca	...	..	3,500
Baikal	360	35	14,800	Anbgus	...		2,000
Great Bear	250	250	14,000	Great Salt	75	35	1,800
Great Slave	300	50	10,000	Nicaragua	140	40	1,500
Erie	240	80	10,000	Champlain	123	12	1,300
Winnipeg	280	5 to 57	9,000	Lake of the Woods	75	55	1,200
Ontario	180	40	7,650	Constance	45	10	180
Ladoga	125	75	6,250				

See Diagram, page 18.

LAND. The following table shows the total cultivated and uncultivated land, its total value, value per inhabitant, and value per cultivated acre:—

COUNTRIES.	Acres (Millions).			Value.		
	Cultivated.	Uncultivated.	Total.	Millions Dollars.	Per Inhabitant.	Per cultivated acre
United States	285	1,620	1,905	9,515	203	25
Great Britain	47	23	70	8,685	210	165
Canada	16	1,902	1,918	900	210	45
France	67	49	116	13,120	350	180
Germany	68	57	125	10,300	225	125
Russia	195	894	1,089	6,930	90	15
Austria	57	85	142	6,150	180	75
Italy	27	41	68	4,050	140	110
Spain	22	20	42	3,300	200	90
Portugal	4	17	21	790	180	125
Belgium	5	1	6	1,225	230	240
Holland	5	2	7	1,060	265	210
Denmark	6	2	8	1,050	530	165
Sweden and Norway	15	156	171	2,110	630	115
Australia	11	1,847	1,858	910	320	35
Argentine Republic	4	773	777	610	225	20
Greece	2	9	11	525	285	90
Total	836	7,498	8,334	71,630	195	85

The above does not include public lands in the United States, Canada, Australia or the Argentine Republic.

LAND Continued:—

The following are the Number of Land Owners in the principal countries—1880—in thousands:—

United States	4,005	Holland	154
Great Britain	180	Denmark	71
France	3,226	Sweden	204
Germany	2,436	Norway	110
Russia	11,336	Greece	163
Austria	3,432	Canada	408
Italy	1,865	Australia	168
Spain	680	Argentine Republic	390
Portugal	252		
Belgium	335	Total	29,415

LAND ACTS (Ireland). 1st in 1850. Encumbered Estates. In 30 years ending December, 1880, the Land Court sold 3,600,000 acres for $263,500,000, nearly $75 per acre.

2nd in 1870. During 10 years down to 1880 the tenants bought 49,300 acres for $4,190,000, say $85 per acre.

3rd in 1881. The working during the first 12 months to August, 1882, was as follows:—

Cases adjudicated	25,849	Old Rent	$2,900,000
Acres affected	710,000	New adjudication	2,320,000
Griffith's valuation	$2,105,000		

Tenants' interests have acquired an average value of $20 per acre.

LAND GRANTS. The United States Government have ceded the following number of acres: To Railroads, 192,000,000; Canals, 4,405,986; Schools, 68,083,914; Military, 62,000,000; Universities, 1,265,520; Agricultural Colleges, 8,098,758; Asylums, 44,978; total, 436,899,156, and over 100 million to homestead settlers.

Under an act of Congress approved Sept. 4, 1841, each State thereafter admitted to the Union was granted 500,000 acres of land for the purposes of internal improvement; 46,080 acres (72 sections), for a State University; 32,000 acres (50 sections) for the purpose of erecting public buildings at the capital; and 32,000 acres for a penitentiary or State prison. The same grant of 500,000 acres was extended to the States of Alabama, Arkansas, Illinois, Indiana, Louisiana, Michigan, Mississippi, and Missouri. The quantity of land thus granted is estimated at 9,000,000 acres.

By act of July 2, 1862, each State, old or new, was granted 30,000 acres of the public domain for each Senator and Representative in Congress (or land scrip to that amount) for the purpose of endowing a College of Agriculture and the Mechanic Arts in each State. Of the 9,600,000 acres estimated to be due the States under this munificent land grant, about 8,200,000 acres have already been located.

See *Homesteads*, also *Land Sales.*

LAND SALES. The total receipts from sales of United States Public Lands from 1797 to 1888 inclusive was $262,079,181. The disposals of the public lands during 1888 were, in acres, as follows:—

Cash entries	5,317,906	Indian lands, sales of	325,049
Homestead entries	9,853,109	Commuted Homesteads	2,137,988
Timber culture entries	3,869,721	Miscellaneous	14,588
Agricultural College scrip locations	480	Indian Homestead entries	1,585
Locations with military bounty land warrants.	19,985		
Donation Entries	1,752	Total number of acres disposed of for the fiscal year	30,116,684
State selections (school, swamp and internal improvement)	12,655,518	Moneys received during the fiscal year	$13,547,637
Lands selected under railroad grants	6,525,300		

The sale of Australian Crown Lands 1876–80 was 24,216,000 acres; acres unsold, 1,888,830,000; other British Colonies; Cape of Good Hope, 7,530,000 sold; 56,900,000 unsold; Ceylon, 144,000, sold; 12,160,000 unsold; Trinidad, 33,000 sold; 790,000 unsold; Natal, 130,000 sold; 3,900,000 unsold.

LANGUAGES. The following table. shows the principal languages spoken throughout the civilized world. (Thousands omitted):—

COUNTRIES.	English.	French.	German.	Italian.	Spanish.	Portuguese.	Russian.
Great Britain	35,200	100	100	40	10	......	......
France	180	36,400	800	250	20	......	......
Germany	120	600	43,300	10	......	......	20
Russia	10	200	3,700	10	2	......	63,200
Austria	5	100	11,600	450	2	......	3,230
Italy	10	840	3	27,330	1	......	......
Spain	4	60	1	1	16,390	20	......
Portugal	2	10	1	......	30	4,220	......
Holland	5	20	400	......	......	......	......
Belgium	15	3,820	240	......	......	......	......
Sweden and Norway	3	40	60	......	......	......	5
Switzerland	5	608	2,031	162	......	......	......
United States	50,300	840	6,130	160	870	10	30
British Colonies	11,680	1,220	80	40	40	......	......
French Colonies	30	2,360	10	50	30	......	......
Spanish America	90	150	40	880	22,300	......	......
Brazil	2	20	80	70	460	8,130	......
The East	2,200	430	50	420	1,180	370	240
The World	99,861	47,818	68,826	29,873	40,835	12,750	66,725

LAW SCHOOLS. See *Schools.*

LEAD. See Diagram, page 30.

LEATHER. See *Hides.*

LEGUMINOUS PLANTS.

Europe	184	South America	605	Levant	250
Mediterranean	468	Australia	229	North Africa	108
United States	183	China	77	Central Africa	130
Mexico	152	East Indies	452	South Africa	395
West Indies	221	Siberia	129	Islands	42

LEMONS. Italy has 4,800,000 trees, which produce 1,260 million lemons per annum.

LEPROSY. There are 2,180 lepers in Norway. The numbers in Spain and Italy are considerable. In the Sandwich Islands the disease is so prevalent that the island of Molokai is set apart for lepers, who are under the direction of a French priest. In the Seychelles Islands leprosy is also common. In Cyprus a leper farm was established in 1820, area, 100 acres; tillage, 11 acres; house, 26 rooms, occupied by 33 males and 13 females; 5 couples married; 2 have children quite healthy, but the rest are childless; all have lost fingers. One woman of 80 has been there 50 years. The death rate is 16 per cent. per annum.

LETTERS. The annual circulation in the principal countries is shown as follows:—

Country.	Millions.	Country.	Millions.
England	1,230	Austria	483
Scotland	127	Italy	196
Ireland	91	Spain	71
United States	2,289	Holland	71
France	595	Belgium	91
Germany	721	Switzerland	65
Sweden and Norway	46	Canada	57
Denmark	25	Australia	36
Portugal	16	Japan	48
Russia	110		

See *Postal Statistics.*

LIBRARIES. The principal libraries of the world are:—

Name of Library.	City.	Volumes.	Date.
National (France)	France	2,164,000	1350
British Museum	London	1,161,000	1753
Imperial	St. Petersburg	1,079,000	1714
Royal	Dresden	900,000	1555
Royal	Munich	800,000	1660
Royal	Berlin	700,000	1650
Royal	Copenhagen	500,000	1550
Imperial	Vienna	400,000	1440
University	Gottingen	400,000	1734
National	Madrid	400,000	1712
Public	Boston	391,338	1852
Grand Ducal	Darmstadt	380,000	1760
Congressional	Washington	396,788	1802
University	Leipzig	350,000	1543
University	Breslau	340,000	1811
Bodleian	Oxford	330,000	1598
University	Heidleberg	310,000	1703
City	Hamburg	300,000	1529
Fac'y of Advocates	Edinburg	300,000	1680
City	Strasburg	300,000	1531
Public Museum	Moscow	300,000	1861
University	Munich	280,000	1575
Harvard	Cambridge, Mass	259,000	1638
Royal	Brussells	250,000	1400
University	Cambridge, England	250,000	1475
University	Freiburg	250,000	1454
Royal	Stockholm	250,000	1690
Ducal	Gotha	240,000	1640
University	Christiana	230,000	1811
Arsenal	Paris	225,000	1781
University	Upsala	220,000	1685
Royal	Koenigsberg	220,000	1544
University	Bologna	200,000	1690
National	Lisbon	200,000	1796
National	Naples	200,000	1780
Yale	New Haven	195,000	1700
Astor	New York	185,000	1849
University	Bonn	185,000	1818
Mercantile	New York	185,000	1820
Mercantile	Philadelphia	140,000	1821

There are nearly 323 public libraries in the United States containing over 10,000 volumes each, and 25,000 smaller libraries with 50 million books. During the late session of Congress (1886) an act was passed to build a suitable fire-proof structure for the National or Congressional Library.

LIFE PERIOD of **Birds.** See *Fecundity of Birds.*

LIFE SAVING SERVICE. The ocean and lake coasts of the United States are picketed with the stations of the Life Saving Service attached to the United States Treasury Department. Sumner I. Kimball is general superintendent, with headquarters at Washington, and there is a corps of inspectors, superintendents, station keepers and crews, extending over the entire coast line, together with a Board on Life Saving Appliances, composed of experts selected from the revenue marine service, the army, the life saving service and civilians.

At the close of the last fiscal year the life saving establishment embraced 233 stations, 176 being on the Atlantic coast, 46 on the lakes, 10 on the Pacific coast, and 1 at the falls of the Ohio, Louisville, Ky.

The statistics of the service for the fiscal year ending June 30, 1890, were as follows:—

	Fiscal Year 1890.	Since Introduction of Life Saving System in 1871.
Number of Disasters	384	5,308
Value of Property Involved	$7,555,908	$89,275,682
Value of Property Saved	$5,451,843	$65,803,935
Value of Property Lost	$2,104,065	$23,471,747
Number of Persons Involved	3,197	46,061
Number os Persons Saved	3,159	45,518
Number of Persons Lost	38	*543
Number of Shipwrecked Persons Succored at Stations	788	8,691
Number of Days Succor Afforded	1,876	22,707
Number of Vessels Totally Lost on the United States Coasts	76	....

*This loss of life includes 183 lost at the wrecks of the Huron and Metropolis, which was not properly chargeably to the service.

There are 272 Life Boats in Great Britain maintained by voluntary contributions amounting to $215,000 per annum. They are manned by 12,000 voluntary seamen, the coxswain alone being paid to mind the boat. Since their establishment in 1824 these boats have saved 29,608 lives, and in 1882 they saved 23 vessels and 884 lives. Life boats were established in France by the Empress Eugenie in 1866, and are now in use at 37 exposed points on the coast.

LIFE. The following table is used by American Life Insurance Companies in computing the probable Expectation of the Life of tbe insured (De Farr):—

Age.	Male.	Female.	Age.	Male.	Female.	Age.	Male.	Female.
0	39.91	41.85	35	29.40	30.50	70	8.45	9.02
1	46 65	47.31	36	28 73	29 94	71	8.03	8 57
2	48 83	49 40	37	28.06	29 29	72	7 62	8.13
3	49 61	50.20	38	27 39	28 64	73	7.22	7 71
4	49.81	50.43	39	26.72	27.99	74	6 85	7.31
5	49 71	50 33	40	20.06	27.34	75	6 49	0.93
6	49 39	50 00	41	25 39	26.69	76	6 15	6.56
7	48.92	49 53	42	24.73	26 03	77	5.62	6.21
8	49 37	48 98	43	24 07	25 38	78	5 51	5.88
9	47 74	48.35	44	23.41	24 72	79	5.21	5.56
10	47.05	47.67	45	22.76	24.06	80	4 93	5 26
11	46.31	46 95	46	22.11	23.40	81	4.66	4 98
12	45.54	46 20	47	21.46	22.74	82	4.41	4.71
13	44.76	45 44	48	20 82	22.08	83	4.17	4.45
14	43.91	44 68	49	20.17	21 42	84	3.95	4.21
15	43.18	43.90	50	19 54	20.75	85	3 73	3 98
16	42.40	41.14	51	18 90	20 09	86	3.53	3.76
17	41 64	42 40	52	18.28	19.42	87	3.34	3 56
18	40.90	41 67	53	17.67	18.72	88	3.16	3.36
19	40.17	40.97	54	17.06	18.08	89	3.00	3.18
20	39.48	40.29	55	16.45	17.43	90	2.84	3.01
21	38 80	39.63	56	15 86	16.79	91	2 69	2 85
22	38 13	88 98	57	15 26	16 17	92	2 55	2 70
23	37.46	38.33	58	14.68	15.55	93	2.41	2.51
24	36.79	37.68	59	14 10	14.94	94	2 29	2 42
25	36.12	37.04	60	13 53	14.34	95	2 17	2.29
26	35 44	36 39	61	12.96	13.75	96	2.06	2.17
27	34.77	35.75	62	12.41	13.17	97	1.95	2.06
28	34.10	35.10	63	11.87	12 60	98	1.85	1.90
29	33.43	34.46	64	11 34	12.05	99	1.76	1.86
30	32.76	33.81	65	10 82	11.51	100	1.68	1.76
81	32 09	33.17	66	10.32	10.98			
32	31 42	32.53	67	9.83	10.47			
33	30 74	32.88	68	9.36	9.97			
34	30 07	31.23	69	8.90	9.48			

American life average for professions (Boston) in years is: Storekeeper, 41.8; teamsters, 43.6; laborers, 44.6; seamen, 46.1; mechanics, 47.3; merchants, 48.4; lawyers, 52.6; farmers, 64.2. The English expectation according to profession of those who will reach 70 years of age in per cent. is: Physicians, 24; teachers, 27; artists, 28; lawyers, 29; clerks, 32; soldiers, 32; merchants, 33; farmers, 40; clergy, 42.

The interesting table of Kasper showing tbe survival of 1,000 born of tbe rich and poor is as follows:—

Age.	Rich.	Poor.	Age.	Rich.	Poor.
5	943	655	40	695	396
10	938	598	50	398	172
20	886	566	70	235	65

LIFE INSURANCE. See *Insurance.*

LIFE. Cost of the Necessaries of. Tbe following table gives the comparative retail prices of the necessaries of life in Europe and the United States in 1884.

[Condensed from tbe Report of the Secretary of State, Wasbington, 1885.]

ARTICLES.	Austria, (Vienna and Prague).	Belgium (Brussels).	France (Marseilles and Rheims)	Germany (Berlin).	Great Britain (Liverpool).	Netherlands (Amsterdam.)	Switzerland (Berne).	United States. 1891. New York.	United States. 1891 Chicago.
Meats—	Cents.	Cents.	Cents.	Cents.	Cents.	Cents.	Cents.	Cents.	Cents.
Bacon .....lb.	15-18	16-20	15-20	....	12-20	16-18	......	16-20	10-12
Ham .....lb.	30-38	30	40-60	25-30	24	16-26	30	16-20	9 15
Beef .....lb.	10-10	15-17	14-30	17-20	14-20	15-29	15-18	10-25	6-18
Mutton .....lb.	9-16	18	14-25	17-20	16-20	16-24	14	11-15	6-15
Veal .....lb.	9-18	18	25 35	22-25	16-20	14-22	16-18	17-25	6-15
Pork .....lb.	....	16	15-20	16-20	16-20	.. ....	18-20	8-13	8-10
Groceries—									
Sugar .....lb.	7- 8	12	6½-12	8-18	4- 7	9-15	8	8	4½ 6½
Tea .....lb.	... ...	....	$1-1.40	70-$2	32-89	17-54	$1-1.50	25-70	25-90
Coffee .....lb.	....	16	35-60	20-40	24-40	13-25	18-32	20-32	23-35
Butter .....lb.	26-28	20	32-60	20-38	24-32	22-33	30	30	18-25
Lard .....lb.	12-16	....	12-16	18	12-16	16-22	20	15-16	7½-10
Cheese .....lb.	.... ..	....	14.24	20	12-22	13-23	....	12-20	10-15
Rice .....lb.	6	4- 5	5-10	5-10	4- 8	3½-6	6	6-10	5-10
Flour .....lb.	3- 5	....	5-10	4½-5½	3½-4	4- 6	4- 6	4- 5	2½-5
Bread .....lb.	3	3- 5	....	5-9	2½-4	2½-5½	4- 5	6- 8	4-6
Potatoes .....lb.	1- 2	1	1- 2	1	8-10 -1	1	8	....	1½-2

LIFE. Period of Birds. See *Fecundity of Birds.*

LIGHT. It requires 50 lbs. of tallow candles to produce as much light as 1,000 cubic feet of gas. Dr. Frankland's table of tbe cost of light is as follows:

	Cost of 10 Hours of Light.		Cost of 10 Hours of Light.
One gallon paraffin oil	6 pence.	16 paraffin candles	46 pence.
Equivalent amount of gas	3 "	20 sperm "	84 "
33 Tallow candles	32 "	24 wax "	87 "

See *Electric Light.*

The loss of light by shades is shown in the following table:

Glass, Etc.	Thickness. Ins.	Loss. Per Cent.	Glass, Etc.	Thickness. Ins.	Loss. Per Cent.
American Enameled	1-16	51.23	Window, double English	1-8	9.39
Crown	1-8	13.08	" " German	1-8	13.
Crystal Plate	1-8	8.61	" single "	1-16	4.27
English	1-8	6.15	" " ground	1-16	65 75
Porcelain Transperancy	1-3	97.68	" green	1-16	81 95

LIGHT HOUSES. There are 3,301 lighthouses in the world; 632 in the United States, 451 in Canada.

LIMITATIONS. Tbe laws of the United States and Canada relating to limitation of actions are as follows:

STATE.	Assault and Slander.	Open Accounts.	Notes and Contracts in Writing.	Sealed Instruments.	Judgements of a Court of Record.	STATE.	Assault and Slander.	Open Accounts.	Notes and Contracts in Writing.	Sealed Instruments.	Judgement of a Court of Record.
	Yrs	Yrs	Years	Yrs	Years		Yrs	Yrs	Years	Yrs	Years
Alabama	1	3	6	10	20	Montana	2	5	10	10	10
Arizona	1	3	5	5	10	Nebraska	1	4	5	5	5
Arkansas	1	2	4	4	5	Nevada	2	2	6	4	5
California	1	2	4	4	5	New Hampshire	2	6	6	20	20
Colorado	1	6	6	6	8	New Jersey	2‡	6	6	16	20
Connecticut	3	6	6	17	17	New Mexico	1	4	6	6	15
Dakota	2	6	6	20	20	New York	2	6	6	20	20
Delaware	1	3	6	20	20	North Carolina	1†	3	3	10	10
District of Columbia	1	3	3	12	12	Ohio	1	6	15	15	15
Florida	2	4	5	20	20	Oregon	2	6	6	10	10
Georgia	¶1	4	7	20	7	Pennsylvania	1	6	0	20	20
Idaho	2	2	4	4	5	Rhode Island	1	6	6	20	20
Illinois	1	5	10	10	20	South Carolina	2	0	6	20	20
Indiana	2	5	20	20	10	Tennessee	1	6	6	10	10
Iowa	2	5	10	10	20	Texas	1	2	4	4§	10
Kansas	1	3	5	5		Utah	1	2	4	4	5
Kentucky	1	5	15	15	15	Vermont	3	6	6	6	8
Louisiana	1	3	5	10	10	Virginia	1	5*	5	20	20
Maine	2	6	6	20	20	Washington	2	5	6	6	6
Maryland	1	3	3	12	12	West Virginia	1	5**	10	10	10
Massachusetts	2	6	6	20	20	Wisconsin	2	6	6	20	20
Michigan	2	6	6	10	10	Wyoming	1	4	5	5	
Minnesota	2	6	6	10	10	CANADA.					
Mississippi	1	3	6	7	7	Province of Ontario	1	6	6	10	10
Missouri	2	5	10	10	10‡‡	Province of Quebec	1	5	5	30	30

†Slander, 6 months. ‡ Assault; 4 years. * Store Accounts, 3 years.
§Seals abolished. ‡‡In certain courts, 20 years. **Store accounts, 3 years.
¶Slander, 1 year.

LINEN. The United States imported in 1886, $30,923,502 worth of linen and flax manufactures. The product of this industry is shown by the following table:

COUNTRIES.	Thousands. Spindles.	Thousands. Power. Looms.	Thousands. Flax Tons.	Value of Products, Million Dollars.
United States	13	7	20	13
Great Britain	1,485	45	107	60
France	762	23	66	40
Germany	327	8	35	20
Russia	445	2	40	20
Austria	415	5	60	38
Italy and Switzerland	64	1	10	6
Belgium and Holland	296	6	30	19
Total	3,507	97	368	216

LIQUOR. See *Distilled Spirits* and *Beer*, also *Internal Revenue.*

LIVING. Cost of The Expenditures among the nations of the world is:—

Countries.	Million Dollars. Food.	Million Dollars. Clothing.	Million Dollars. Sundries.	Million Dollars. Total.	Per Inhabitant.	Million Dollars. Income.	Million Dollars. Surplus.
United States	2,870	1,200	1,980	6,050	112.0	7,100	1,050
Great Britain	2,365	690	2,410	5,465	156.5	6,235	770
France	1,960	550	1,605	4,125	108.5	4,825	700
Germany	2,530	550	970	4,050	90.0	4,250	200
Russia	2,580	610	560	3,750	44.0	3,800	50
Austria	1,600	450	760	2,810	76.0	3,010	200
Italy	1,020	150	240	1,410	49 5	1,460	50
Spain	615	100	175	890	53 0	940	50
Belgium, Holland	510	150	360	1,020	105 5	1,120	100
Norway, Sweden.	375	100	220	695	77 5	745	50
Total	16,425	4,560	9,280	30,265	86 3	33,485	3.220

Food includes liquor and tobacco, and therefore contributes a good share of the taxes in each country. Clothing also pays its share to the public revenue.

LIVE STOCK. See *Agricultural Products*, also *Cattle*, and Diagram, page 43.

LLAMAS. There are 4 millions in Peru, mostly employed as beasts of burden. The skin weighs 6 lbs, gives 18 feet of leather, and is worth $5.00.

LOANS. The following amounts given as loans of the several countries in 1881 does not represent in all cases the whole external debt, much less the entire public debt. The total of foreign loans quoted on the London stock exchange in 1825 ammounted to no more than 525 million dollars. They have increased 22-fold—to-wit: Given in million dollars, United States 1,520; France. 1,505; Italy, 1,450; Austria, 1,185; Spain, 880; Russia, 725; Turkey, 720; Australia, 470; Egypt, 420; India, 415; Holland. 400; Portugal, 190; Peru, 160; Germany, 150; Canada, 140; Mexico, 140; Belgium, 135; River Platte, 120; Brazil, 110; Greece, 55; Colombia, 50. The total of British capital in foreign loans and railways is estimated to be 5,290 million dollars. The British government is guarantee on loans—the original amount of which is $178,080,000, balance unpaid in 1881, $109,485,000.

LOCOMOTIVES.

	Number in 1880.	Annual Traffic per Locomotive. Passengers.	Annual Traffic per Locomotive. Goods, Tons.
United States	17,790	22.200	23,600
Great Britain	13,480	97,800	31,500
Germany	9,400	43,000	30,100
France	6,220	51,600	21,200
Austria	3,600	18,800	25,300
Russia	8,560	20,500	16,500
Italy	1,600	35.200	9,700
Other Countries	7,460	35.400	14,700
Total	63,110	48,110	25,400

LOCOMOTIVES.—Continued.

For passenger trains a locomotive burns one ton of coke per 80 miles, and for freight trains per 40 miles. The consumption in Great Britain is equal to 6 million tons of coal per annum, and the railways of the world burn 25 million tons, although wood is used in some countries. An ordinary locomotive, say 300 horse-power will cost $10,000, and during its life run about 200,000 miles, say 13,000 miles per annum for 15 years. One house at Berlin, that of Mr. Borsig, has turned out 4,000 locomotives since 1840, in which year Mr. Borsig began with a capital of $7,500, lent him by a friend; he employs 10,000 workmen.

The most powerful locomotives in the world are on the railways leading out of Chicago; 50 tons weight, 61 feet long, tender 3,000 gallons, cylinder 18x24 inches, with 6 feet driving wheels.

LOCUSTS. In Russia 600 soldiers can sweep one ton of locusts into ditches per day, and destroy them. In Cyprus the peasants destroy annually 60 tons of locust eggs, equal to 680 million locusts, at a cost of $12,000, or $200 per ton.

LOCUST TREE. The carob or algarroba covers 19,000 acres in Cyprus, averaging 30 trees per acre. Average crop 25,000 tons, worth $375,000, most of which goes to Scotland to be made into whisky.

LONGEVITY. To be told that, under proper conditions we ought to live one hundred years, and that the discouraging doctrine of the influence of heredity in shortening life is only true in a limited sense, is interesting to most people. So also is the circumstance that we are living longer than we used to live, and the assurance that much may yet be done to prolong our lives. These and analogous topics were given in a recent lecture by Dr. John Foster, of Bradford, England, read at the Sheffield Medico-Chirugical Society: "The late Dr. Farr, in his description of the march through life of a million children, has given the following results: Nearly 150,000 will die in the first year, 52,000 in the second year, 28,000 in the third, and less than 4,000 in the thirteenth year. At the end of 45 years 500,000, or one half, will have died. At the beginning of 60 years, 370,000 will still be living. At the beginning of 80 years, 90,000; at 85 years, 38,000; and at 95 years, 2,100. At the beginning of 100 years there will be 223, and at 108 years, 1. The mean lifetime of both sexes in England was calculated, some years ago, to be 40,858, or nearly 41 years. Mr. H. Humphreys has shown, however, that in the 5 years, 1876 to 1880, the mean age at death was 43.56 (females 45.3) being a gain of nearly 2¾ years. Thus within 20 years, notwithstanding an increased birth rate, density of population, and the unsanitary condition of towns suddenly grown large, more than 2½ years have been added to the life of every inhabitant of England.

LORDS. The House of Lords (1885) comprised 6 peers of the royal blood, 22 dukes, 20 marquises, 118 earls, 28 viscounts, 2 arch bishops, 24 bishops, 277 barons, 16 Scottish peers, and 28 Irish representative peers; total 541 members. In 1890 there were 557 members, 12 of whom were minors.

LUMBER. In 1880 there were 25,680 establishments engaged in the manufacture of lumber, using a total steam and water horse-power of 821,928; employing about 150 thousand hands; producing 18,091,356,000 feet of timber, board measure; 1,761,788,000 laths, 5,555,046,000 shingles, 1,248,226,000 staves, 146,523,000 sets of headings, 34,076,000 feet (board measure) spool and bobbin stock. Total value of all products, $233,268,729. See *Timber*.

MACHINERY. The United States Census report 1880 enumerates 4,958 establishments engaged in the manufacture of machinery, employing 145,351 hands, production valued at 214⅓ million dollars. This is exclusive of iron and steel manufactures.

1. A sewing machine does the work of 12 women. The United States export 105,000 of these machines yearly.

2. A Boston "bootmaker" will enable a workman to make 300 pairs of boots daily. In 1880 there were 3,100 of these machines working in various countries, turning out 150 million pairs of boots yearly.

3. Glenn's California reaper will cut, thresh, winnow and put up in bags the wheat of 60 acres in 24 hours.

4. The Hercules ditcher, Michigan, removes 750 cubic yards, or 700 tons of clay per hour.

5. The Darlington borer enables 1 man to do the work of 7 in making a tunnel and reduces the cost to one-third of work done by hand; it also permits a week's work to be done in 2 days.

MADDER. The best is grown near Avignon, on irrigated lands, for which the tenants pay $25 an acre rent. Average crop, 2 tons per acre, worth $250, leaving small profit to the cultivator.

MANUFACTURES. The value of the principal American manufactures according to the census of 1880 were, in million dollars: Flour, 590; Leather and Boots, 365; Lumber, 280; Carpentry, 270; Cottons, 270; Woolens, 215; Clothing, 280; Machinery, 260; Liquor, 145; Sundries, 2,885; Total, 5,560. See Diagram for *Manufactures of the World*, page 38.

MANURE. The annual production per animal in hundred weight is: Cow, 120; Horse, 100; Ass, 40; Pig, 30; Sheep, 14; Goat, 10.

MARBLE. Italy exports annually 105,000 tons. The United States imported in 1886 marble valued at $898,194; paying $368,958 custom duties; and exported marble valued at $159,553. Marble is 7 per cent. heavier than stone, and 5 per cent. lighter than granite; one cubic foot weighs 160 lbs., that is 14 cubic feet per ton.

MARINE OILS. See *Oil*.

MARRIAGE. The number of marriages per 1,000 inhabitants annually is:—

Great Britain	7.60	Austria	8 55
France	7 95	Hungary	10 30
Germany	8.85	Switzerland	7.65
Holland	8.05	Italy	7 65
Belgium	7.20	Spain	7 55
Denmark	7.80	Australia	7 00
Sweden	6 80		

The ratio of persons marrying will be of course double the above, each marriage being here counted singly.

In all countries about 5 per cent. of marriages prove barren, the tendency being greatest among consanguineous marriages. Among the English nobility, for example, 19 per cent. are childless. Married women live two years longer than single ones, although 1 in 70 dies in childbirth, since 3 births in 1,000 costs the mother's life. The duration of marriage in years is:—

England	27	Russia	30	Holland	23
France	26	Norway	24	Belgium	23
Germany	26	Sweden	23	Jews	25

In the United States and England if the mother die first, the father survives 9½ years; but if the father die first the mother survives 11½ years.

A Woman's Chances of Marriage at Various Ages. This curiously constructed exhibit, by Dr. Granville, is drawn up from the registered cases of 870 married women in France. Owing to the difference in climate in the United States, it is safe to say that our women are no nearer maturity at 20 than the French at 18. Of the 876 tabulated, there were married:—

Years of age.	Years of age.	Years of age.	Years of age.	Years of age.	Years of age.
3 at 13	77 at 18	59 at 23	22 at 28	7 at 33	2 at 37
11 at 14	115 at 19	53 at 24	17 at 29	5 at 34	0 at 38
16 at 15	118 at 20	36 at 25	9 at 30	3 at 35	1 at 39
43 at 16	86 at 21	24 at 26	7 at 31	0 at 36	0 at 40
45 at 17	85 at 22	28 at 27	5 at 32		

From salutary experience, it would be safe to say that the best results would follow did our girls not marry until after 20, and our men till 22, or even 24.

MEAT. The production and consumption of meat is as follows:

	Production, Thousands of Tons.					Consumption, Tons. Thousands.
	Beef.	Mutton.	Pork.	Fowl, &c.	Total.	
United States	1,750	340	1,420	60	3.570	3,060
Great Britain	666	346	145	38	1,195	1,640
France	550	210	240	80	1,060	1,210
Germany	785	230	285	45	1,345	1 405
Russia	1,050	430	445	50	1,965	1,920
Austria	655	180	275	40	1,150	1,090
Italy	165	70	55	25	315	295
Spain and Portugal	170	180	130	10	490	460
Belgium	82	6	24	6	118	190
Holland	95	9	12	5	121	98
Denmark	80	18	16	2	116	76
Sweden and Norway	150	27	18	6	201	196
Greece	12	15	1	1	29	31
Roumania, Etc	160	50	60	10	280	300
Canada	135	36	45	5	221	198
Total	6,505	2.137	3,171	363	12,176	12,169

An engine of 70-horse power can refrigerate a chamber for 250 tons of frozen meat from Australia to Europe, using 1 cwt. of coal per hour, or 1¼ ton per day.

The flocks and herds of the River Platte and Australia are capable of yielding a large meat crop, but at present the sheep are grown only for wool, and cattle are in some seasons slaughtered for their hides. If the available supply be taken at 07 per cent. of what the same number would give in Europe, the meat crop annually of those countries would be:—

	River Platte.	Australia.	Total.
Beef, tons	650,000	310,000	960,000
Mutton "	520,000	450,000	970,000
Pork "	11,000	24,000	35,000
Total	1,181,000	784,000	1,965,000

Meat loses in cooking. Full-grown animals average as follows:—

	Meat,	Fat, &c.	Hide.	Total.
Cattle	680	356	84	1,120 lbs.
Sheep	91	43	18	152 "

Cows give from 70 to 160 lbs. tallow. The Liebig factory at Fray Bentos makes 1 lb. beef extract from 34 lbs. meat.

100 lbs. raw beef = 67 lbs. roast.
100 " " = 74 " boiled.
100 " raw mutton = 75 " roast
100 lbs. raw fowl = 80 roast.
100 " " = 87 boiled.
100 " raw fish = 94 boiled.

MEAT PACKING. See *Pork Packing. Hams and Bacon. Food of all Nations*

MEDICAL SCHOOLS. See *Schools.*

MERCURY.

	Tons Production.		Tons Consumption.
California	1,380	Great Britain	1,550
Spain	1,090	United States	570
Austria	275	China	500
Other countries	595	Other Countries	720
Total	3,340	Total	3,340

Mercury is worth $1,100 per ton.

METALS.

A.

	Conductors of Heat.	Conductors of Electricity.		Conductors of Heat.	Conductors of Electricity.
Gold	100	94	Iron	37	16
Platinum	98	16	Zinc	36	29
Silver	97	74	Tin	30	15
Copper	90	100	Lead	18	2

METALS—Continued.

B.—Tenacity.

A wire, 0.84 of a line in diameter, will sustain the following weights:—

Lead	28 lbs.	Silver	187 lbs.
Tin	35 lbs.	Platinum	274 "
Zinc	110 "	Copper	302 "
Gold	150 "	Iron	549 "

C.—Fluid Density.

Zinc	6.48	Copper	8.22
Iron	6.88	Silver	9.51
Tin	9.03	Lead	10.37

For general statistics, see *Mining;* for particular, see each metal under its own title.

METALS More Precious than Gold. The following are the names of those metals valued at over $1,000 an avoirdupois pound, the figures given representing the value per pound:—

Vanadium—A white metal, discovered in 1830, $10,000.

Rubidium—An alkaline metal, so-called, for exhibiting dark red lines in the spectrum analysis, $9,070.

Zirconium—A metal obtained from the minerals zircon and hyacinth, in the form of a black powder, $7,200.

Lithium—An alkaline metal, the lightest metal known, $7,000.

Glucinum—A metal in the form of a greyish black powder, $5,400.

Calcium—The metallic base of lime, $1,500.

Strontium—A malleable metal of a yellowish color, $1,200.

Terbium—Obtained from the mineral gadolinite, found in Sweden, $4,080.

Yttrium—Discovered in 1828, is of grayish black color, and its luster perfectly metallic, $4,080.

Erbium—The metal found associated with yttrium, $3,400.

Cerium—A metal of high specific gravity, a greyish white color, with a lamellar texture, $3,400.

Didymium—A metal found associated with cerium, $3,200.

Ruthenium—Of a grey color, very hard and brittle, extracted from the ores of platinum, $2,400.

Rhodium—Of a white color and metallic luster, and extremely hard and brittle. It requires the strongest heat that can be produced by a wind furnace for its fusion, $2,300.

Niobium—Previously named columbinum, first discovered in an ore found at New London, Ct., $2,300.

Barium—The metallic base of baryta, $1,800.

Palladium—A metal discovered in 1802, and found in very small grains, of a steel grey color and fibrous structure, $1,200.

Osmium—A brittle, grey colored metal, found with platinum, $1,400.

Iridium—Found native as an alloy with osmium in lead grey scales, and is the heaviest of known substances, $1,090.

The value of the other metals per pound is as follows:—

Uranium	$90.00	Magnesium	$5.00	Bismuth	$2.50
Titanium	689.00	Potassium	25.00	Mercury	.65
Chromium	500.00	Aluminum	1.25	Arsenic	.50
Gold	328,12	Silver	15.75	Tin	.25
Molybdedum	225.00	Cobalt	8.00	Copper	.25
Thallium	225.00	Sodium	5.00	Antimony	.35
Platinum	240,00	Nickel	1.00	Zinc	.06
Manganese	48.00	Cadmium	1.00	Lead	.05
Tungstein	30.00				

The value of a ton of pure gold is $656,240.

$1,000,000 gold coin weigh 3,685.8 lbs. avoidupois.

The value of a ton of silver is $31,500.

$1,000,000 silver coin weigh 58,929.9 lbs. avoirdupois.

See Diagram, *Production of Precious Metals*, page 42.

MILITARY PAY. The yearly pay of officers and men in England, France and the United States is shown in the following table:—

	England.	France.	United States
Lieut General	——	$3,300	$11,000.
Major General	——	——	7,500.
Brigadier Gen'l	——	——	5,500.
Colonel	$5,000	1,400	3,500.
Lieut. Colonel	1,600	1,100	3,000.

	England.	France.	United States.
Major	$1,460	900	$2,500
Captain	1,060	600	1,800
Lieutenant	590	400	1,500
Ensign	500	260	——
Sergeant	180	75	252
Private	90	25	156

MILITARY Strength of Nations. See Diagram, page 26.

MILITIA. See Diagram, page 26.

MILK. The average annual supply and consumption is:—

	Milch Cows.		Milk, Million Gallons.			Value, Millions, $	Per Inhab., $
	Number, Thousands.	Per 100 Inhab.	Used as Milk.	Butter, &c.	Total.		
United States	12,440	24	2,300	2,500	4,800	365	7.2
United Kingdom	3,750	11	700	800	1,500	200	5.5
Canada	970	22	130	270	400	35	7.7
Holland	540	14	50	280	330	45	11.0
France	4,300	12	850	600	1,450	115	8.0
Germany	5,900	13	840	1,170	2,010	160	3.5

The Components of Milk are as follows:—

	Water.	Fat.	Caseine.	Sugar.	Total.
Woman	89.3	2.5	3.4	4.8	100.0
Cow	86.0	4.0	7.2	2.8	100.0
Ass	90.9	1.1	1.9	6.1	100.0
Goat	86.8	3.3	4.0	5.9	100.0
Ewe	85.6	4.2	4.5	5.7	100.0

See *Butter*, also *Cheese.*

MINING. The value of Minerals is shown by the following table:—

Countries.	In Million Dollars.					No. of Miners, Thousands Omitted.	Result per Man.
	Gold.	Silver.	Coal.	Sundries.	Total.		
United States	85	40	140	170	385	560	700
Great Britain	......	......	335	60	395	538	730
France	......	......	55	15	70	206	350
Germany	......	5	70	20	95	231	410
Russia	30	......	15	5	50	207	240
Austria	......	......	22½	15	37½	92	430
Italy	......	......	......	10	10	36	260
Spain	......	2½	......	30	32½	70	430
Belgium	......	......	30	2½	32½	105	310
Sweden	......	......	......	6	5	29	175
Spanish America	5	25	2½	17½	50	150	330
Australia	25	......	5	10	40	95	420
Other Countries	6	2½	5	5	17½	70	250
The World	100	75	680	365	1,220	2,389	450

The deepest working mines of the world, as given by Mulhall, are in coal mines. The Lambert, Belgium, 3,490 feet; Zwickau, Saxony, 2,637 feet; Rosebridge, England, 2,510 feet; DuKinfield, England, 2,448; Chaumont, France, 1,876 feet. Silver mines, the Birkenberg, Austria, 3,280 feet; St. Andre, Prussia, 2,532 feet; Kongsberg, Norway, 1,869; Schemnitz, Hungary, 1,771; La Huerta, Spain, 1,548 Gold Mines: The Magdala, 1,990 feet. See Diagram, page 31.

MINT. See *Coin.*

MONEY. See *Coin, Paper Money, Specie* and Diagram. Page 31.

MONEY ORDERS. The number of money orders purchased in the United States in 1889-90: Domestic, 10,624,727; amount $114,362,757.12; average order, $10.76; fees received, $950,755,57. Number of foreign orders 859,054; amount $13,230,135,71; average $15.40; fees received $163,613,90. See *Pastoffice Statistics.*

MORTALITY. Rates of. The Carlisle Tables showing how many persons out of 10,000 will annually die, on the average, until all are deceased. Used by all Life Insurance Companies in their computations of risk, premiums, etc.

Year.	No. Alive.	Deaths.	Year.	No. Alive.	Deaths.	Year.	No. Alive.	Deaths.	Year.	No. Alive.	Deaths.
At birth	10,000	1539	27	5793	45	54	4143	70	81	837	112
1	8461	682	28	5748	50	55	4073	73	82	725	102
2	7779	505	29	5698	56	56	4000	76	83	623	94
3	7274	276	30	5642	57	57	3924	82	84	529	84
4	6998	201	31	5585	67	58	3842	93	85	445	78
6	6797	121	32	5528	56	59	3749	106	86	367	71
6	6676	82	33	5472	55	60	3633	122	87	296	64
7	6594	56	34	6417	55	61	3521	126	88	232	51
8	6536	43	35	5362	55	62	3395	127	89	181	39
9	6493	33	36	5307	56	63	3268	125	90	142	37
10	6460	29	37	5251	57	64	3143	125	91	105	30
11	6431	31	38	5194	58	65	3018	124	92	75	21
12	6400	32	39	5136	61	66	2894	123	93	54	14
13	6368	33	40	5076	66	67	2771	123	94	40	10
14	6335	35	41	5009	69	68	2648	123	95	30	7
15	6300	39	42	4940	71	69	2525	124	96	23	5
16	6261	42	43	4809	71	70	2401	124	97	18	4
17	6219	43	44	4798	71	71	2277	134	98	14	3
18	6176	43	45	4727	70	72	2143	146	99	11	2
19	6133	43	46	4657	69	73	1997	156	100	9	2
20	6090	43	47	4588	67	74	1841	166	101	7	2
21	6047	42	48	4521	63	75	1675	160	102	5	2
22	6005	42	49	4458	61	76	1515	156	103	3	2
23	5963	42	50	4397	59	77	1359	146	104	1	1
24	5921	42	51	4338	62	78	1218	132			
25	5879	43	52	4276	65	79	1081	128			
26	5836	43	53	4211	68	80	953	116			

MOUNTAINS. See Diagram, page 50.

MURDER. See *Crime.*

NATIONAL BANK NOTES. See *Currency*

NATURAL HISTORY. See *Geology.*

NAVY. See *Iron Clad Fleets* and Diagram, page 26.

NAVIGATION. See *Shipping.*

NECESSARIES OF LIFE, See *Wages.*

NEWSPAPERS. The progress of the American Periodical Press is shown by the following table.

	All Classes.		Dailies.		Weeklies.		All Others.	
	Number	Circulation.	Number	Circulation.	Number	Circulation.	Number	Circulation.
1860	4,051	13,663,409	387	1,478,435	3,173	7,581,930	491	4,603,044
1870	5,871	20,842,475	574	2,601,547	4,295	10,594,643	1,002	7,646,285
1880	11,403	31,177,924	980	2,637,424	8,718	19,459,107	1,705	8,081,393
1890	16,948	41,524,000	1,536	6,653,250	12,603	23,228,750	2,809	11,642,000

Total number of Periodicals published in English	15,861
Total number of Periodicals in foreign languages	1,087
Periodicals devoted to news, politics and family reading	13,103
Religious Periodicals	795
Agricultural Periodicals	401
Periodicals devoted to general literature	625
Periodicals of all other classes	2,024
Number of copies of Periodicals printed in census year, 1880	1,344,101,235
Amount paid in wages by periodical publishers, census year, 1880	$28,571,330
Value of products of the periodical press, census year, 1880	$87,441,132

NICOTINE. Orfila found in Havana tobacco, 2 per cent; French tobacco, 6 per cent; Virginia, 7 per cent; Brazilian is still higher.

NITRE is found in Chili. Atacama exports 350,000 tons per annum; the nitre is about 2 feet below the surface. One bed covers 5,000 acres, and is 4 feet in thickness, say 25 million tons, worth 1,500 dollars.

NORMAL SCHOOLS. See *Schools.*

NURSE TRAINING SCHOOLS. See *Schools.*

OAK. See *Trees.*

OATS. See *Agricultural Products.*

OBSERVATORIES. The number of observatories in the various countries is:—Germany 20; United States 21; Great Britain 14; Russia 12; Italy 9; Austria 8: Spanish America 7; France 6; Switzerland 4; Australia 3; Asia 2: Africa 2; Canada 1. All other countries, 12. Total 130. Tbe Leyden Observatory was founded 1632; The Copenhagen, 1637; Greenwicb, England, 1675; Paris, 1677. The largest Telescopes in the world with size of aperture in incbes are, Lord Rosse 72; Lassell 48; Herscbell, 58; Polkova 30; San Jose, California, 28; Vienna 27; Washington 26; Newcastle 25; Pultowa 16; Cambridge, Massachusetts, 15; Paris 13; Greenwich 12; Cincinnati 12; Munich 11; Rome 10; Berlin 10. Lord Rosse's telescope brings the moon apparently within 50 miles of our view.

OCCUPATIONS. The workers of all nations, as given by Mulhall, is shown by the following table:—

Countries.	Thousands.			Ratio.		
	Agriculture	Manufacture.	Various.	Agriculture.	Manufacture.	Various
United States	7,713	3,526	18,876	26	12	62
Great Britain	2,989	6,241	11,289	14 6	30.4	55 0
France	14,162	6,615	6,988	51	24	25
Germany	12,920	10,140	7,014	43	34	23
Russia	40,590	2,436	6,494	81	5	14
Austria	13,755	3,266	7,987	55	13	32
Italy	12,862	1,274	4,174	70	7	23
Spain	8,360	1,344	6,416	30	12	58
Portugal	1,251	220	1,306	45	8	47
Belgium	1,512	1,436	828	40	38	22
Holland	1,563	321	806	58	12	30
Norway and Sweden	3,540	520	1,750	61	9	30
Total	116,217	37,339	73,928	51	17	32

OIL. The number of lbs. of oil from 100 lbs. of the following articles is:—

Horsechestnuts	6	Indian linseed	29	Almonds	48
Beechmast	16	Olives	33	Poppy	58
Bempseed	18	Rape	33	Walnuts	60
European linseed	25	Colza	40	Castor oil seed	62

The Production of Olive Oil is as follows:—

	Acres (Thousands Omitted.)	Tons, Olives.	Oil, Million Gallons.	Gallons per Acre.	Value of Crop (Thousands Omitted).
Italy	2,224	110,000	31	14	$29,000
Spain and Portugal	1,500	90,000	25	16	19,000
France	320	22,000	6	18	6,000
Greece	400	18,000	5	12	3,500
Total	4,444	240,000	67	15	$57,500

MARINE OILS.

	Annual Slaughter.	Gallons Oil.	Gallons per Carcass.
Whales	1,500	3,300,000	2,200
Seals	550,000	2,600,000	5
Penguins	1,300,000	130,000	1-10th

About 300 gallons of oil will suffice in 20 minutes to smooth tbe rougbest sea (Admiralty experiments, Aberdeen, December 3, 1882.)

PETROLEUM OIL.

There are nearly 20,000 Petroleum oil wells in the Pennsylvania oil region, less than one-third are working; their depth varies from 400 to 1,200 feet; each well costs about $5,000, and only 1 in 5 strike oil. The Petroleum output of the United States for 1881 was valued at $78,000,000. The price at New York Exchange during 1886 was from 60 to 92 cents, or an average of 76 cents per barrel of 42 gallons.

AMOUNT OF OIL IN SEEDS.

Kinds of Seed.	Per Cent Oil.	Kinds of Seed.	Per Cent Oil.
Rapeseed	55	Oats	6½
Sweet Almond	47	Clover Hay	5
Turnip Seed	45	Wheat Bran	4
White Mustard	37	Oat Straw	4
Bitter Almond	37	Meadow Hay	3½
Hempseed	19	Wheat Straw	3
Linseed	17	Wheat Flour	3
Indian Corn	7	Barley	2½

OPERATIVES. The number employed throughout the world in tbousands is:—

Countries.	In Factories.		Mining.	Handicraft	Total.	Ratio to Population Per Cent.
	Textile.	Various.				
United States	545	1,534	660	787	3,526	7
Great Britain	1,060	720	550	3,911	6,241	18
Germany	632	480	231	8,797	10,140	22
France	620	430	206	5,359	6,615	18
Austria	360	490	92	2,324	3,266	9
Russia	354	286	207	1,589	2,436	3
Italy	130	240	36	868	1,274	5
Spain	90	110	71	1,073	1,344	8
Belgium	280	130	105	921	1,436	26

OPIUM. The annual shipments from India are 6,005 tons, valued at $63,200,000. The Chinese impose a duty of £5 per ton. It is retailed there at 50 cents per ounce, or double the price of native opium. The province of Hankow produces 5,300 tons annually. Tbere are in China over 3 million opium smokers.

ORANGES. Italy has 5,400,000 trees, which give 1,600 million oranges yearly, say 300 per tree. The average in Seville is said to be 600 per tree. The island of St. Michael's, Azores, with an area of only 210,000 acres, sends 250 million oranges yearly to England, worth $1,500,000. There is no record of tbe production of the orange groves of either Florida or California, vast quantities of which reach the markets of the east and northwest.

ORCHARD PRODUCTS. See diagram, page 42.

OSTRICHES. Cape Colony leads in the production of ostrich feathers, 35,000 birds are plucked annually averaging 3 lbs. per bird. The world's production is as follows: Cape Colony, 260,000 lbs.; Buenos Ayres, 160,000 lbs.; Tripoli, 20,000 lbs.; Egypt, 4,000 lbs.; Morocco, 2,000 lbs.. A few years since an ostrich farm was started in Southern Calfornia, near Los Angeles, under most favorable circumstances.

OYSTERS. The yearly production in millions is: United States, 11,200; Portugal 600; France, 380; Great Britain, 300. Baltimore packs 7 million bushels annually. Oysters are not fit to eat before 4 years old.

OZOKERIT. Ozokerit is a mineral oil from layers of wax found at Borislav, Galitzia. Tbe mines are about 250 feet deep, employing 9,000 men, who raise 30,000 tons, worth $2,400,000 per annum.

PACIFIC RAILROADS. The United States bave issued to tbe Pacific railroads (1886) $64,623,512 worth of bonds—and paid interest on same to the amount of $70,854.35—have received back in transportation $21,091,383. The companies have paid into sinking funds $9,658,713—leaving a deficit on interest account paid by the government $40,104,229. These bonds are registered and bear 6 per cent interest in currency and mature 30 years from date.

The Canadian government have expended on public works and bonuses paid for railway extensions (1887) $9,500,000; besides this $10,000,000 was paid to the Canadian Pacific road in lieu of its land grant. This great trans-continental line, which crosses the whole Dominion from ocean to ocean, was opened for general traffic on June 28, 1886. Its main line is 2,893 miles long.

PAINTING AND PAPER HANGING. In 1880 there were in the United States 3,068 establishments with a capital of $5,600,000, employing 17,711 hands; value of production 14 million dollars.

PAPER. The production and consumption in each country is:

COUNTRY.	In Million lbs.		COUNTRIES.	In Million lbs.	
	Production.	Consumption.		Production	Consumption.
United States	530	540	Switzerland	20	18
Great Britain	470	430	Holland	16	16
Germany	450	410	Canada	14	18
France	380	330	Portugal	10	10
Austria	160	120	Spanish America	2	44
Italy	105	110	Australia		17
Russia	80	90	Turkey and Greece		12
Belgium	70	40	Other Countries		98
Scandinavia	38	30			
Spain	20	32	Total	2,365	2,365

In 1880 there were 692 manufacturing establishments in the United States, capital 46 millions, employing 24,422 hands; total value of production, 55 million dollars. The 15 million copies of daily papers of tbe world consume 490; the 55 millions issue of weekly and monthly, 380, and the 85 million volumes of books, 150 million lbs. annually, or 1,020 million lbs. for printing. Schools consume 190; public offices 160; letters 220; blank books 120; wall-paper 450 and papier mache, &c., 205, a total of 2,365 million lbs. Paper is now used in building, in the manufacture of wheels for railroad cars, in the manufacture of flour barrels and water pails, and in various other ways. The dome of the new Palais de Justice, Brussels, is all of paper. One barrel factory in Iowa turns out nearly 2,000 barrels daily, from 5 tons of paper, each barrel taking 0 lbs.

PAPER MONEY. The amount of paper money in the world is about $3,345,000,000—distributed in million dollars as follows: United States 935; Russia 575; France 450; Austria 325; Italy 325; Spanish America 325; Spain, Belgium, &c. 320; Great Britain 225; Japan 130; Cuba, 60.

The following table exhibits the amount *per capita* issued of the Continental money, the French *assignats*, the Confederate currency, and the legal-tender greenbacks and national bank-notes of the United States.

	POPULATION.	AMOUNT ISSUED.	Amount per head.
		Dollars.	Dollars.
Continental money	3,000,000 in 1780.	359,546 825	119 84
French assignats	26,500,000 (France in 1790.)	9,115,600,000	343 98
Confederate currency	9,103,332 (11 Confederate States, 1860.)	654,465,963	71 89
Greenbacks and national bank-notes	31,443,321 (United States in 1860.)	Highest amount in circulation, Jan. '66, 750,820,228	23 87

See diagram, page 31.

PARKS. The Park Areas in acres of the most noted in the world are as follows: Yellowstone National Park has an area of 3,575 square miles, or 2,288,000 acres, with an altitude of from 6,000 to 12,000 feet. The wonders and attractions of this remarkably picturesque region are fully described under Wyoming (q. v.) The

Parks Continued.

Canadian and United States governments in 1886 set apart large and valuahle property adjacent to the Falls and the Niagara River for the free use hy the public as an International Park. The Great Park at Versailles near Paris is nearly 50 miles in circumference. Fountains, walks and parterres abound in all directions. $200,000,000 were expended upon the great palace and grounds. Here Louis XIV. attracted multitudes by the magnificences of his court. Other parks are: Windsor, Eng., 3,800 acres; Fairmont, Philadelphia, 2,740 acres; Water Park, Vienna, 2,300 acres; Bois de Bologne, Paris, 2,100 acres; Phœnix, Dublin, 1,760 acres; Forest, St. Louis, 1,350 acres; Royal, Munich, 1,300 acres; South, Chicago, 1,055 acres; Golden Gate, San Francisco, 1,043 acres; Central, New York, 843 acres; Druid Hill, Baltimore, 680 acres; Thier Garten, Berlin, 600 acres; Prospect, Brooklyn, 550 acres; Regents, London, 450 acres; Queen's, Edinburgh, 407 acres; Hyde Park, London, 400 acres; Schloss Garten, Stuttgart, 320 acres; Grosse, Dresden, 300 acres; Victoria, London, 290 acres; Tower Grove, St. Louis, 277 acres; Lincoln, Chicago, 230 acres; Eden, Cincinnati. 216 acres; Humboldt, Chicago, 193½ acres; Northern, St. Louis, 180 acres; Garfield, Chicago, 171 acres; Douglas, Chicago, 171 acres; Burnett's, Woods, Cincinnati, 170 acres; City, New Orleans, 150 acres; Prospect, Buffalo, 150 acres; Shaw's Garden, St. Louis, 109 acres; Jardin de Plantes, Paris, 77 acres; Patterson, Baltimore, 70 acres; Lindell, St. Louis, 60 acres; Jardin de Tuilleries, Paris, 50 acres; Common, Boston, 48 acres.

PATENT OFFICE. The returns for Great Britain and United States compare as follows: Average number of applications, Great Britain 6,000. United States 20,000. Patents granted, Great Britain 4,000; United States 12,000. Receipts, Great Britain, $950,000: United States, $700,000. Average fees, Great Britain, $260; United States, $60. Average terms, Great Britain, 14 years; United States 17 years.

SCHEDULE OF PRICES.

(United States.)

On filing each application for a patent	$15
On issuing each Original Patent (17 years)	20
On application for reissue	30
On application for extension	50
On granting every extension of Patent (7 years)	50
On each caveat	10
On appeal to Examiner-in Chief	10
On appeal to Commissioner of Patents	20
On filing a disclaimer	10
On application for design (3½ years)	10
On application for design 7 years)	15
On application for design (14 years)	30
On each Trade-Mark (30 years)	25
On each label (28 years)	6

PAUPERS. There were were in 1880 88,665 paupers in the United States, 67,067 of whom were inmates of alms houses; 35,952 male, 31,115 female; of this number but 18 were Chinese, and 33 Indians; as compared with other countries, the United States seems greatly hlessed. Other countries have as follows: England, 803,000; Ireland, 115,000; Scotland, 99,000; total, Great Britain, 1,017,000; Italy, 1,365,000; Germany, 1,310,000; France, 1,251,000; Austria, 1,220,000; Netherlands, 1,000,000; Spain, 600,000; Scandinavia, 300,000; Switzerland, 140,000.

PEAT. The area of the Peat Bogs of Great Britain and Ireland is ahout six and a half million acres; the average depth 12 feet, equal to a yield per acre of 12 thousand tons of dried turf. The hog of Allen, Ireland, has from 30 to 60 per cent more heating power than all other. In 1887 on the northern railways of Russia, the locomotives hitherto hurning wood or coal, are being adapted for peat burning, the saving heing estimated at some 50 per cent.

PENITENTIARIES. In 1880 there were 30,623 prisoners in the penitentiaries of the United States 29 211 males, 1,412 females; of whom 24,731 were natives, 5,892 foreign. In 1881, there were 114 penitentiaries in Canada, with 3,393 inmates.

PENSIONS. The following are the rates of pension per month:—

Disabilities.	Rate from July 4, 1864.	Rate from Mar. 3, 1865.	Rate from June 6, '66.	Rate from June 4, 1872	Act of June 1880.*
Loss of both hands	$25 00			$31 25	$72 00
Total disability in both hands			$25 00	31 25	
Loss of both feet	20 00			31 25	72 00
Total disability of both feet			20 00	31 25	
Loss of sight of both eyes	25 00			31 25	72 00
Loss of sight of one eye, the sight of the other having heen previously lost			25 00	31 25	72 00
Loss of one hand and one foot		20 00		24 00	36 00
Total disability in one hand and one foot			20 00	24 00	
Any disability equivalent to the loss of one hand or foot			15 00	18 00	
Any disability incapacitating for the performance of manual labor			20 00	24 00	
Any disability resulting in a condition requiring the aid and attendance of another person			25 00	31 25	June 4, '74. 50 00
Total deafness				13 00	

*Rate from June, 1880, in case the disability is permanent and requires the regular aid and attendance of another person. An applicant for increase of pension from $31.25 to $72 per month must furnish the testimony of his physician, or two credihle witnesses, to prove the extent to which he requires the aid and attendance of another person.

PETROLEUM. On April 27, 1887, the first steamhoat ever run hy crude petroleum was the Vincent on Chautauqua Lake, New York, between Jamestown and Mayville, a distance of 28 miles, consuming one and one-half harrels of crude oil—costing $1—ordinarily this steamer consumes 2 tons of coal at a cost of $7, in making the trip, Frank Lilly, a machinist at Jamestown, N. Y., is the patentee. See Oil.

PEPPER. The annual production averages, in million pounds—Sumatra 2; Siam 8, Malacca 7, Malabar 4, Borneo, 3.

PIGS.—See *Pork.*

PLAGUES.—Remarkahle plagues of modern times;—

Date.	PLACE.	Deaths.	Weeks.	Deaths per wk.
1656	Naples	380,000	28	10,400
1665	London	68,800	83	2.100
1720	Marseilles	89,100	36	1,100
1771	Moscow	87,800	32	2,700
1778	Constantinople	170,000	18	9.500
1798	Cairo	88,000	25	8.500
1812	Constantinople	144,000	13	11,100
1834	Cairo	57,000	18	3,200
1835	Alexandria	14,000	17	900
1871	Buenos Ayres	26.300	11	2.400

In the Great Plague of 1346 over 876 thousand victims were reported in 15 of the cities of Europe. See *Cholera.*

PLUMBING and Gas-Fitting.—The United States Census of 1880 gives 2,161 establishments, capital, $5,900,000; employing 19,383 hauds; value of production, $18,100,000.

POLITICAL History of the United States. Tahle showing the Numher of Votes cast, hoth Popular and Electoral, for each of the Candidates for President and Vice-President, from the Foundation of the Government to the Present Time; Together with an account of the Numher of States Voting at Each Election.

Year.	States.	Total Elec. V.	Party.	Candidates for President.	States.	Popular Vote.	Electoral Vote.	Candidates for Vice-Presidents.	ctoral Vote.
1789..	10	73	F.	Geo. Washington			69		
			F.	John Adams					34
			F.	John Jay					9
			F.	R. H. Harrison					6
			F.	John Rutlege					6
			A. F.	John Hancock					4
			A. F.	Geo Clinton					3
			F.	S. Huntington					2
			A. F.	John Milton					2
			A. F.	J. Armstrong					1
			F.	Benj. Lincoln					1
			A. F.	Edward Telfair					1
				Vacancies-1			4		4
1792..	15	135	F.	Geo. Washington			132		
			F.	John Adams					77
			R.	Geo. Clinton					50
			R.	Thos. Jefferson					4
			R.	Aaron Burr					1
				Vacancies 2			3		3
1796..	16	138	F.	John Adams			71		
			R.	Thomas Jefferson					68
			F.	Thos. Pinckney					59
			R.	Aaron Burr					30
			R.	Samuel Adams					15
			A. F.	Oliver Ellsworth					11
			R.	Geo. Clinton					7
			F.	John Jay					5
			F.	James Iredell					3
			F.	Geo. Washington					2
			F.	John Henry					2
			F.	S. Johnson					2
			F.	C. C. Pinckney					1
1880..	16	138	R.	Thos. Jefferson-S			73		
			R.	Aaron Burr					73
			F.	John Adams					65
			F.	C. C. Pinckney					64
			F.	John Jay					1
1804..	17	176	R.	Thos. Jefferson	15		162	Geo. Clinton 4	162
			F.	C. C. Pinckney	2		14	Rufus King	14
1808..	17	176	R.	James Madison	12		122	Geo. Clinton	113
			F.	C. C. Pinckney	5		47	Rufus King	47
			R.	Geo. Clinton			6	John Langdon	9
								James Madison	3
								James Monroe.	3
				Vacancies-5			1		1
1812..	18	218	R.	James Madison	11		128	E. Gerry-6	131
			F.	Dewitt Clinton	7		89	J. Ingersoll	86
				Vacancy-7			1		1
1816..	19	221	R	James Monroe	16		183	D. D. Tompkins	183
			F.	Rufus King	3		34	J. E. Howard	22
								James Ross.	5
								J. Marshall	4
								Robt. G. Harper	3
				Vacancies 8			4		4
1820..	24	235	R.	James Monroe	24		231	D. D. Tompkins	218
			O.	J. Q. Adams.			1	Rich. Stockton	8
							8	Daniel Rodney	4
								Rohert G. Harper	1
								Richard Rush	1
				Vacancies-9			3		3
1824..	24	261	R.	Andrew Jackson-10	10	155,872	99	J. C. Calhoun	182
			C.	J. Q. Adams	8	105,321	84	Nathan Sanford	30
			R.	W. H. Crawford	3	44,282	41	Nathaniel Macon	24
			R.	Henry Clay	3	46,587	37	Andrew Jackson	18
								M. Van Buren	9
								Henry Clay	2
				Vacancies 11					1
1828..	24	261	D.	Andrew Jackson	15	647,231	178	J. C. Calhoun	171
			R.	J. Q. Adams	9	509,097	83	Richard Rush	83
								William Smith	7
1832	24	288	D.	Andrew Jackson	15	687,502	219	M. Van Buren	189
			R.	Henry Clay	7	530,189	49	John Sargent	49
			A. M.	John Floyd	1	23,108	11	Henry Lee	11
				Wm. Wirt	1		7	Amos Ellmaker	7
								Wm. Wilkins	30
				Vacancies-12			2		2
1836..	26	294	D.	M. Van Buren-13	15	761,649	170	R. M. Johnson 13	147

NOTE.—No returns of the popular vote for President are preserved with any accuracy prior to 1824; During the earlier elections, the majority of the states chose the Presidential Electors by their Legislatures, and not by popular vote. Even as late as 1824, six states thus voted, while the state of South Carolina continued to choose Presidential Electors by her Legislature until 1868.

NOTE.—Previous to the election of 1804 each elector voted for two candidates for President; the one receiving the highest number of votes if a majority, was declared elected President, and the next highest, Vice-President.

POLITICAL HISTORY OF THE UNITED STATES—CONTINUED.

Year.	State.	Total Elec. V.	Party.	Candidates for President.	States.	Popular Vote.	Electoral Vote.	Candidates for Vice-President.	Electoral Vote.
			W.	W. H. Harrison	7	736,656	73	Fr. Granger	77
				Hugh L. White	2		26	John Tyler	47
				Daniel Webster	1		14	Wm. Smith	23
				W. P. Mangum	1		11		
1840	26	294	W.	W. H. Harrison-14	19	1,275,017	234	John Tyler	234
			D.	M. Van Buren	7	1,128,702	60	R. M. Johnson	48
			L.	Jas. G. Birney		7,059			
								L. W. Tazewell	11
								Jas. K. Polk	1
1844	26	275	D.	Jas. K. Polk	15	1,337,243	170	Geo. M. Dallas	170
			W.	Henry Clay	11	1,299,068	105	Tr. Frelinghuysen	105
			L.	James G. Birney		62,300			
1848	30	290	W.	Zach Taylor-15	15	1,360,101	163	M. Fillmore	163
			D.	Lewis Cass	15	1,220,544	127	Wm. O. Butler	127
			F. S.	M. Van Buren		291,263		Chas. F. Adams	
1852	31	296	D.	Franklin Pierce	27	1,601,474	254	Wm. R. King-16	254
			W.	Winfield Scott	4	1,386,578	42	Wm. A. Graham	42
			F. S.	John P. Hale		156,149		Geo. W. Julian	
1856	31	296	D.	Jas. Buchanan	19	1 838,169	174	J. C. Breckenridge	174
			R.	J. C. Fremont	11	1,341,264	114	Wm. L. Dayton	114
			A.	M. Fillmore	1	874,534	8	A. J. Donelson	8
1860	33	203	R.	A. Lincoln-17	17	1,866,352	180	H. Hamlin	180
			D.	J. C. Breckenridge	11	845,763	72	Joseph Lane	72
			C. U.	John Bell	3	589,581	39	Edw. Everett	39
			I. D.	S. A. Douglas	2	1,375,157	12	H. V. Johnson	12
1864	36	314	R	A Lincoln	22	2,216,067	212	Andrew Johnson	212
			D.	Geo. B McClellan	3	1,808,725	21	G. H. Pendleton	21
				Vacancies-18	11		81		81
1868	37	317	R.	U. S. Grant	26	3,015,071	214	Schuyler Colfax	214
			D.	Horatio Seymour	8	2,709,613	80	F. P. Blair, Jr.	80
				Vacancies-19	3		23		23
1872	37	366	R.	U. S. Grant	31	3,597,071	286	Henry Wilson-20	286
			D & L	Horace Greeley	6	2,834,079		B. Gratz Brown	47
			D.	Chas. O'Connor		29,408		Geo. W. Julian	5
			T.	James Black		5,608		A. H. Colquitt	5
				T. A. Hendricks			42	Jno. M. Palmer	3
				B. Gratz Brown			18	T. E. Bramlette	3
				C. J. Jenkins			2	W. S. Groesbeck	1
				David Davis			1	W. B. Mackin	1
								N. P. Banks	1
				Vacancies-21			17		14
1876	38	369	R.	R. B. Hayes	21	4,033,295	185	Wm. A. Wheeler	185
			D.	S. J. Tilden	17	4,284,265	184	T. A. Hendricks	184
			G.	Peter Cooper		81,740			
			P.	G. C. Smith		9,522			
				Scattering		2,636			
1880	38	369	R.	James A. Garfield-23	19	4,450,921	214	Chester A. Arthur	214
			D.	W. S. Hancock	19	4,447.888	155	Wm. H. English	155
			G.	James B. Weaver		307,740		B. J. Chambers	
			P.	Neal Dow		10,305		H. A. Thompson	
				Scattering		1,696			
1884	38	401	D.	Grover Cleveland	20	4.874,986	219	T. A. Hendricks-24	219
			R.	James G. Blaine	18	4,851,981	182	John A. Logan	182
			G.	Benj. F. Butler		175,370		A. M. West	
			P.	J. P. St. John		150,369		Wm. Daniel	
1888	38	401	R	Benjamin Harrison	20	5,441,923	233	Levi P. Morton	233
			D	Grover Cleveland	18	5,536,524	168	Allen G. Thurman	168
			P	Clinton B. Fisk		246,406		John A. Brooks	
			U. L.	A. J. Streeter		144,603		C. E. Cunningham	
				Scattering		14,509			

NOTE.—In the column showing to which party the candidate belonged, we have only used the initial letter: F. Stands for Federalist; A. F. Anti-Federalist; R. Republican; O., Opposition; C. Coalition: A. M. Anti-Mason; D., Democratic; W., Whig; L., Liberty; F, S., Free Soil; A., American; C. U., Constitutional Union; I. D., Independent Democrat; D. & L., Democrat and Liberal; T., Temperance; G., Greenback; P., Prohibitionist.

1 Electoral votes not cast; Vt. 28; Md. 2.

2 Electoral votes not cast; Md. 2; Va. 1.

3 The vote for Thos. Jefferson and Aaron Burr being a tie, the election devolved upon the House of Representatives, resulting on the 36th ballot, in the choice of Jefferson as President. Burr receiving the next highest number of votes, was declared Vice-President.

4 George Clinton, Vice-President, died April 20, 1812.

5 Electoral vote not cast; Ky. 1.

6 Elbridge Gerry, Vice-Pres., died Nov. 23, 1813.

7 Electoral vote not cast; Ohio 1.

8 Electoral votes not cast; Md, 3; Del. 1.

9 Electoral votes not cast; Miss. 1; Pa.1 Tenn.1.

10 There being no choice for President, the election devolved upon the House of Representatives, a choice being made at the first ballot, Adams receiving the vote of 13 States, Jackson, 7 States, and Crawford, 4 States.

11 Electoral vote not cast; for Vice Pres., R. I. 1.

12 Electoral votes not cast; Md. 2.

13 No candidate having received a majority of the electoral votes for Vice President the Senate elected R. M. Johnson by a vote of 33 to 16 for Francis Granger.

14 President Harrison died April 4, 1841. Vice President John Tyler became President.

15 President Taylor died July 9, 1850. Vice President Fillmore became President.

16 W. R. King, Vice President, died April 18, 1853.

17 President Lincoln assassinated April 14, 1865, died April 15, 1865. Vice President Johnson became President.

18 Electoral votes not cast; Nevada, 1: States in rebellion 80 viz: Ala., 8; Ark., 5; Fla., 3; Ga., 9; La., 7; Miss. 7; N. C., 9; S. C., 6; Tenn., 10; Tex., 6; Va., 10.

19 Elc'l votes not cast: Miss. 7: Tex. 6: Va., 10.

20 Henry Wilson, Vice Pres., died Nov. 22, 1875.

21 Electoral votes thrown out; 3 of Ga. for Greeley then deceased: Ark., 6: La., 8, because of double returns from both states.

22 Decided by an electoral commission appointed by congress.

23 Assassinated July 2, 1881 died Sept. 19, 1881.

24 Thomas A. Hendricks, Vice President; died November 25th, 1885.

See diagram. *Political Parties.*

POLITICAL Parties in the United States.

POLITICAL Parties in Great Britain.

POLITICAL Parties of Europe.

POPES.—The several countries of Europe are represented in the list of Pontiffs as follows: English, 1; Dutch, 1; Swiss, 1; Portugeuse, 1; African, 2; Austrian, 2; Spanish, 5; German, 6; Syrian, 8; Greek, 14; French, 15; Italian, 197; total, 253. Eleven have reigned over 20 years; 69, from 10 to 20; 57, from 5 to 10; and 116 less than 5 years. The present Pope, Leo XIII, is the 253d pontiff. When full the total number of the sacred college is 70—composed of Cardinal Bishops, 6; Cardinal Priests, 50; Cardinal Deacons, 14; there are 4 vacancies at present. The Roman Catholic Hierarchy throughout the world, according to official returns published at Rome, in 1884, consisted of 11 Patriarchs, and 1,153 Archbishops and Bishops. Including 12 coadjutor or auxiliary bishops, the number of Roman Catholic archbishops and bishops now holding office in the British Empire is 134. On May 18, 1886: Archbishop Gibbons, of Baltimore, received official notice of his elevation to the cardinalate by Pope Leo XIII. This is the second American citizen to receive this high ecclesiastical honor.

POPULATION of Cities. See diagram, page 46.

POPULATION Of Countries. See diagram, page 19.

POPULATION of the United States. The following table presents the final official figures of the population of the United States from 1790 to 1890.

States and Territories	1790.	1810.	1830.	1850.	1870.	1880.	1890.
Alabama			309,527	771,623	996,992	1,262,505	1,513,017
Alaska						32,426	
Arizona					9,658	40,440	59,620
Arkansas			30,388	209,897	484,471	802,525	1,128,179
California				92,597	560,247	864,694	1,208,130
Colorado					39,864	194,327	412,198
Connecticut	237,946	261,942	297,675	370,792	537,454	622,700	746,258
Delaware	59,096	72,674	76,748	91,532	125,015	146,608	168,493
District of Columbia		24,023	39,834	51,687	131,700	177,624	230,392
Florida			34,730	87,445	187,748	269,493	391,422
Georgia	82,548	252,433	516,823	906,185	1,184,109	1,542,180	1,837,353
Idaho						32,610	84,385
Illinois		12,282	157,445	851,470	2,539,891	3,077,871	3,826,351
Indiana		24,520	343,031	988,416	1,680,637	1,978,301	2,192,404
Indian Territory						78,310	
Iowa				192,214	1,194,020	1,624,615	1,911,896
Kansas					364,399	996,096	1,427,096
Kentucky	73,677	406,511	687,917	982,405	1,321,011	1,648,690	1,858,635
Louisiana		76,556	215 739	517,762	726,915	939,946	1,118,587
Maine	96,540	228,705	399,455	583,169	626,915	648,936	661,086
Maryland	318 728	380,546	447,040	583,034	780,894	934,943	1,042,390
Massachusetts	378,787	472,040	610,408	994,514	1,457,351	1,783,085	2,238,943
Michigan		4,762	31,639	397,654	1,184,059	1,636,937	2,093,889
Minnesota				6,077	439,706	780,773	1,301,826
Mississippi		40,352	136,621	606,526	827,922	1,131,597	1,289,600
Missouri		20,845	140,455	682,044	1,721,295	2,168,380	2,679,184
Montana						39,159	132,159
Nebraska					122,993	452,402	1,058,910
Nevada					42,491	62,266	45,761
New Hampshire	141,885	214,460	269,328	317,976	318,300	346,991	376,530
New Jersey	184,139	245,562	320,823	489,555	906,096	1,131,116	1,444,933
New Mexico				61,547	91,874	119,565	153,593
New York	340,120	959,049	1,918,608	3,097,394	4,382,759	5,082,871	5,997,853
North Carolina	393,751	555,500	737,987	869,039	1,071,361	1,399,750	1,617,947
North Dakota						36,909	182,719
Ohio		230,760	937,903	1,980,329	2,665,260	3,198,062	3,672,316
Oklahoma							61,834
Oregon				13,294	90,923	174,768	313,767
Pennsylvania	434,373	810,091	1,348,233	2,311,786	3,521,951	4,282,891	5,258,014
Rhode Island	68,825	76,931	97,199	147,545	217,353	276,531	345,506
South Carolina	249,073	415,115	681,904	668,507	705,606	995,577	1,151,149
South Dakota					14,181	98,268	328,808
Tennessee	35,691	261,727	681,904	1,002,717	1,258,520	1,542,359	1,767,518
Texas				212,592	818,579	1,591,749	2,235,523
Utah				11,380	86,786	143,963	207,905
Vermont	85,425	217,895	280,652	314,120	330,551	332,286	332,422
Virginia	747,610	974,600	1,211,405	1,421,661	1,225,163	1,512,565	1,655,980
Washington					23,955	75,116	349,390
West Virginia					442,014	618,457	762,794
Wisconsin				305,391	1,054,670	1,315,497	1,686,880
Wyoming					9,118	20,789	60,705
TOTALS	3,929,214	7,239,881	12,866,020	23,191,876	38,558,371	50,155,783	62,622,250
Per Cent. of Gain		36.38	32.51	35.83	22.65	30.08	24.8

In 1800 there was no town in the United States having over 100,000 population, but 2 in 1820, 4 in 1840, 9 in 1860, 28 in 1890. In 1890 there were also 28 towns having over 50,000 and under 100,000, and 103 between 20,000 and 50,000. The increase in population in the United States since 1830 has averaged 32 per cent. every 10 years. Should this increase continue there will be 83,000,000 in the year 1900.

See Diagram, page 19.

WHITE AND COLORED POPULATION OF THE UNITED STATES AT EACH CENSUS—1790–1880.

	1790	1800	1810	1820	1830
White	3,172,006	4,306,446	5,862,073	7,862,166	10,537,378
Colored Free	59,527	108,437	186,446	233,634	319,599
Colored Slaves	697,681	893,603	1,191,362	1,538,022	2,009,043
Indians Civilized					
Chinese					
Total	3,929,214	5,308,483	7,239,881	9,633,822	12,866,020

WHITE AND COLORED POPULATION OF THE UNITED STATES—Continued.

	1840	1850	1860	1870	1880
White	14,195,805	19,553,068	26,922,537	33,589,377	43,402,970
Colored Free	386,293	434,495	488,070	4,880,009	6,580,793
Colored Slaves	2,487,355	3,204,313	3,953,760	None	None
Indians Civilized			44,021	25,731	66,407
Chinese			34,933	63,254	105,613
Total	17,069,453	23,191,876	31,443,321	38 558,371	50,155,783

In 1890, there were 6,996,166 colored persons in the Southern States, against 6,142,360 in 1880.

PORK. The worlds slaughter of hogs—(1880) was as follows:—

	Thousands Omitted			Average lbs. per carcass.	Lbs. of Meat per Inhab.
	No. of Pigs	Killed Yearly.	Meat in Tons.		
United States	47,680	32,000	1,420	100	60
Great Britain	3,190	2,100	145	155	9
France	5,810	3,900	240	138	15
Germany	7,130	4,800	285	133	15
Russia	10,514	7,000	445	140	12
Austria	7,080	4,700	275	129	16
Italy	1,570	1,000	55	124	4
Spain and Portugal	5,323	3,600	130	81	14
Belgium and Holland	1,006	650	36	125	9
Scandinavia	1,040	700	34	109	9
Switzerland	335	200	10	112	8
Roumania, &c	2,310	1,500	60	88	19
Canada	1,425	900	45	112	23
Australia	815	500	20	90	15
River Platte	362	200	8	90	6
Cape Colony	164	100	4	90	8
Total	95,754	63,850	3,212	115	19

THE AGGREGATE WINTER PORK-PACKING IN THE WEST BY STATES, WAS AS FOLLOWS:

STATES.	Number of Hogs Packed.		Average Gross Weight.		Average Yield of Lard.		Cost, Gross, 100 pounds.	
	1884–5	1883–4	1884–5	1883–4	1884–5	1883–4	1884-5	1883–4
Ohio	559,903	523,075	267.08	257.05	34 74	33 16	$4 43	$5.21
Indiana	406,655	350,415	243 17	232 02	31 03	28.11	4.26	5.28
Illinois	2,526,748	2,150,341	273 11	213 39	38.46	34.51	4.37	5.24
Iowa	766,593	624,604	263.72	245 06	35.84	32 65	4.07	5.06
Missouri	1,198,092	919,034	263.41	261.41	35.76	36 16	4 24	5.17
Kansas	19,848	34,493	283 36	268.89	34.13	35.26	4.02	5 28
Nebraska	202,200	143,270	272 09	275.72	43 00	41 46	4.08	5 10
Minnesota	51,700	43,300	298.40	269 04	27.00	23.99	4 17	4 78
Wisconsin	397,303	315,093	258.43	223.22	31.23	24 57	4.23	5.09
Michigan	70,579	67,793	268 45	243.05	30.35	28.19	4 28	5 51
Kentucky	182 812	156.394	264 18	254 11	29 47	28.46	4.42	5 04
Tennessee	27.880	35,152	255.05	234.52	33 42	29 50	4 32	4.97
Miscellaneous	49,842	39,100	245.09	233.09	31.65	32.03	4 18	5 34
Total	6,460,240	5,402,064	266 51	251.44	36.02	33 25	$4.29	$5.18

THE YEARLY PACKING AT LEADING PLACES.

Total number of Hogs packed during 12 months, ending March 1, at leading places which pack in both winter and summer seasons.

	1884–85	1883–84	1882–83
Chicago	4,228,205	3.911,792	4,222,780
Kansas City	1,231,148	1,015,460	813,834
St. Louis	711,901	607,222	552,180
Cincinnati	513,016	489,631	507,316
Milwaukee	308 949	368,887	405.510
Indianapolis	539.038	470,212	388,417
Cedar Rapids	403,674	339,013	327,163
Cleveland	181,412	205,156	218,885
St. Joseph	157,634	111,600	152,365
Louisville	210,214	170,435	143,393

	1884–85	1883–84	1882–83
Ottumwa	185,183	108,744	131,554
Omaha	171,100	113,770	151,006
Des Moines	105,969	67.215	90,871
Detroit	98,067	84,523	99,155
Keokuk	98.950	68 622	63.446
Sioux City	103.003	138,754	106,740
Dubuque	112,557	135.500	112,500
Nebraska City	120,000	72,000	35.000
All Points	10,519,108	9,183,100	9,342,099

THE NUMBER OF HOGS PACKED IN THE WEST FOR THE 12 MONTHS ENDING MARCH 1. FOR FOURTEEN YEARS.

	Summer.	Winter.	Total.
1884-85	4,058,868	6,460,240	10,519,108
1883-84	3,781,036	5,402,064	9,183,100
1882–83	3,210,787	6,132,212	9,342,099
1881-82	4,803,689	5,747,760	10,551,449
1880–81	5,323,898	6,919,456	12,243,354
1879-80	4,051,248	6,950,451	11,001,699
1878–79	3,378,044	7,480,648	10,858,792
1877–78	2,543,120	6.505,446	9,048,566
1876–77	2,307,866	5,101,308	7,409,174
1875–76	1,262,343	4,880,185	6,142,478
1874–75	1,200,444	5,566,226	6,766,670

	Summer.	Winter.	Total.
1873–74	1,062,916	5,466,200	6,529,116
1872–73	505,500	5,410,314	5,915,614
1871-72	250,000	4.831,558	5,081,558
Aggregate number of hogs packed in the whole West, winter and summer, 1885			10,519,108
Aggregate number packed in the East and on the Pacific coast, 1885			4,508,233
Total hogs packed in the U. S.			15,027,341

In 1880 there were 872 meat packing establishments in the United States, with a capital of $49,419,213; employing 27,297 hands, slaughtering 1,755,533 beeves 2,293,701 sheep, 16,098,428 hogs; paying $267,738,902 for material used and value of animals, with total value of products $303,562,413.

POSTAL NOTES. United States. They are now issued for sums less than $5, for a fee of 3 cents and are payable to any person presenting them, at any money order postoffice in the United States. See *Money Orders.*

POSTAL RATES. United States.—

First Class Matter.—LETTERS. Matter containing writing matter closed against inspection, Two Cents an ounce, or fraction thereof; on Local or Drop Letters at free delivery offices, Two Cents, other offices One cent.

Second Class Matter. NEWSPAPERS AND PERIODICALS. One Cent for Four Ounces or Fraction Thereof.

Publishers and News Agents to regular subscribers the rate is One Cent per pound, or fraction thereof, weight unlimited.

Third Class Matter consists of BOOKS, CIRCULARS AND PAPERS (Called Newspapers, but not so recognized by the P. O; Department). Weight limited to 4 lbs., except books. One Cent for two Ounces or fraction thereof prepaid.

Fourth Class Matter includes—MERCHANDISE OF ALL KINDS.—Glassware and Liquids Prohibited. One Cent an Ounce or Fraction Thereof.

Rates to Canada on 1st, 2d and 3d class matter same as Domestic, 4th class rigidly prohibited.

Registered Letters. 10 cents additional. Immediate delivery letters 10 cents additional by special stamp.

POSTAL RATES. Canada.

Letters posted in Canada, addressed to any place within the Dominion (including Manitoba, British Columbia and Prince Edward Island), 3 cents per ½ oz.; if unpaid, such letters cannot be forwarded, but will be sent to the Dead Letter Office. If liable to more than one rate of postage, and insufficiently prepaid, the letter will (provided one full rate of 3 cents be paid) be forwarded to its destination and double deficiency charged on delivery. Letters mailed at any office for delivery at or from the same office are charged 1 cent each, and must be prepaid; otherwise they are sent to the Dead Letter Office. All charges must be prepaid by postage stamp.

Postal Cards.—From any place in Canada to any other place in Canada or in the United States, 1 cent each. British and Foreign 2 cents each.

United Kingdom.—Postage on letters, 5 cents per ½ oz.; whether by Canadian or New York steamers. If sent unpaid, double postage will be charged.

Newfoundland. Postage on Letters, 5 cents per ½ oz.; Newspapers, (see "Transient Newspapers") Post Cards, 2 cents each. Prepayment necessary.

United States.—The rate on letters to the United States is the same as in Canada, and must be prepaid.

Registration of Letters.—Persons posting letters containing value should be careful to require them to be Registered and obtain from the Postmaster a certificate of receipt for Registration.

The charge for Registration (use Registration Stamp), in addition to the postage is as follows, viz:

On letters to any other place in Canada, or British North America	2 cents
On letters to the United States	5 "
On letters for the United Kingdom	5 "
On Parcels, Patterns or Samples, in Canada	5 "
On Book Packets, and Newspapers to United Kingdom	5 "

Both the Postage charge and Registration fee must in all cases be prepaid by stamp.

Registered Letter stamps have been issued of the denominations of 2 and 5 cents, which may be obtained of any Stamp Agency.

Registration Stamps cannot be used in payment of postage, nor can Postage Stamps be used in payment of Registration fees.

Registration is not an absolute guarantee against the miscarriage or loss of a letter; but a Registered Letter can be traced where an Unregistered Letter cannot, and the posting and delivery or non-delivery can be proved.

POST OFFICES. See *Descriptions of Countries.*

POST OFFICE SAVINGS BANKS. See *Savings Banks.*

POST OFFICE STATISTICS. The business of the United States Postoffice Department for 1890 was as follows:—

Whole number of post-offices in operation in the United States	63,137
Number of Presidential post-offices (where the salary exceeds $1000 per annum, and postmasters are appointed by the President and confirmed by the Senate)	2 814
Whole length of public mail routes in operation—miles	427 991
Length of Railroad routes	154,789
Length of steamboat routes	10 456
Length of other routes (Star service)	237,456
Aggregate cost of mail service	$33,885.978
Aggregate postage on newspapers and periodicals	$1,873.005
Aggregate postage stamps, envelopes and cards sold	$42.374.655
Number of registered letters and packages mailed	14 940.081
Amount of fees on registered matter (in addition to postage)	$1,216 616
Number of dead letters and parcels received	5,618.181
Total cost of free delivery service	$7,976,202
Receipts of postage on local matter at free delivery offices	$10 184.764
Number of money orders issued (domestic)	10,624,727
Amount of money orders purchased (domestic)	$114,362,857
Average amount of each money order (domestic)	$10 76
Fees received for issue of money orders (domestic)	$824.220
Number of money orders (foreign or international)	859 054
Amount of money orders purchased (foreign)	$13,230,135
Average amount of each money order (foreign)	$15 40
Fees received for issue of money orders (foreign)	$163,613
Cost of the United States Ocean Mail service	$551.790
Whole number of packages (foreign) mailed during the year (estimated)	41,273,312
Number of postal notes issued	6,927,825
Amount of postal notes-issued (from 1 cent to $4.99)	$12,160.489
Amount of fees received for postal-notes	$208,123

POSTOFFICES. The correspondence as shown by the reports of the several postoffice departments of nations in 1886 was as follows—(given in millions).

Countries.	Letters.	Papers.	Sundries.	Total.	Per Inhab.
United States	1,155	761	327	2.243	45
United Kingdom	1,299	134	249	1.682	49
France	595	354	401	1,350	86
Germany	721	452	126	1,299	29
Russia	110	75	7	192	2
Austria	483	79	37	599	16
Italy	196	86	77	359	13
Spain	71	41	6	118	7
Portugal	16	8	2	26	6
Belgium	91	69	37	197	36
Holland	71	85	14	120	30
Denmark	25	26	2	53	27
Sweden and Norway	46	33	2	81	12
Switzerland	65	50	15	130	46
Greece	3	..	1	4	2
Roumania	6	2	..	8	2
Canada	57	15	7	79	18
Australia	36	26	1	73	27
India	121	10	4	135	1
Japan	48	14	1	63	2
South America	36	9	9	54	2
Algeria	7	1	..	8	3
Egypt	8	1	..	4	1
Java	4	1	1	6	1
The World	5,[illegible]	2.292	1.326	8.883	13

POTATOES. In 1888 the potatoe crop was 202 million bushels, valued at $81-413,589, average price per bushel, 43 cents. The annual average world's production in value in thousand dollars is: Germany 288; France 142; Russia 112; Austria 101; Canada 50; Ireland 50; Holland and Belgium 41; Scandinavia 25; England 23; Italy and Spain 15; Scotland 11.

Potatoes were introduced into Germany in 1710; into Russia in 1769 and into Scotland some years later.

POULTRY. See Eggs.

POWER. See Industries.

PRESIDENTS and Cabinets of the United States.—Presidents of the United States with their Cabinets from 1780 to 1889.

PRESIDENTS.	Inaugurated.	VICE-PRESIDENTS.	Inaugurated.	SEC'Y OF STATE.	Appointed.	SEC'Y OF TREAS'Y.	Appointed.	SEC'Y OF WAR.	Appointed.	SEC'Y OF NAVY.	Appointed.	SEC. OF INTERIOR	Appointed.	POSTMAST'R GEN.	Appointed.	ATTORNEY GEN	Appointed.
George Washington	1789	John Adams	1789	Thomas Jefferson	1789	Alex. Hamilton	1789	Henry Knox	1789	Henry Knox	1789	Interior Depart. created 1849.		Samuel Osgood	1789	E. Randolph	1789
George Washington	1793	John Adams	1793	Edm. Randolph	1794	Oliver Wolcott	1795	T. Pickering	1794	T. Pickering	1794			T. Pickering	1791	Wm. Bradford	1794
				Tim. Pickering	1795			J. McHenry	1796	J. McHenry	179[illegible]			Jos. Habersham	1795	Charles Lee	1795
John Adams	1797	Thomas Jefferson	1797	Tim. Pickering	1797	Oliver Wolcott	1797	J. McHenry	1797	George Cobot	1798			Jos. Habersham	1797	Charles Lee	1797
				John Marshall	1800	S. Dexter	1800	S. Dexter	1800	B. Stoddert	1798						
								John Marshall	1800								
								Rog. Griswold	1801								
Thomas Jefferson	1801	Aaron Burr	1801	James Madison	1801	S. Dexter	1801	H. Dearborn	1801	B. Stoddert	1801			Jos. Habersham	1801	Th. Parsons	1801
Thomas Jefferson	1805	George Clinton	1805			Albert Gallatin	1802			Robert Smith	1802			Gideon Granger	1802	Levi Lincoln	1801
										J. Crowinshield	1805					Robert Smith	1805
																J. Breckinridge	1805
																C. A. Rodney	1807
James Madison	1809	George Clinton	1809	Robert Smith	1809	Albert Gallatin	1809	William Eustis	1809	Paul Hamilton	1809			Gideon Granger	1809	C. A. Rodney	1809
James Madison	1813	Elbridge Gerry	1813	James Monroe	1811	G. W. Campbell	1814	J. Armstrong	1813	William Jones	1813			R. J. Meigs	1814	W. Pinckney	1811
						Alex. J. Dallas	1814	James Monroe	1814	B. W. Crowinshield	1814					Richard Rush	1814
								W. H. Crawford	1815								
James Monroe	1817	Dan. D. Tompkins	1817	John Q. Adams	1817	W. H. Crawford	1817	Isaac Shelby	1817	B. W. Crowinshield	1817			R. J. Meigs	1817	William Wirt	1817
James Monroe	1821							J. C. Calhoun	1817	S. Thompson	1818			John McLean	1823		
										John Rogers	1823						
										S. L Southard	1823						
John Q. Adams	1825	John C. Calhoun	1825	Henry Clay	1825	Richard Rush	1825	James Barbour	1825	S. L. Southard	1825			John McLean	1825	William Wirt	1825
								P. B. Porter	1828								
Andrew Jackson	1829	John C. Calhoun	1829	Martin Van Buren	1829	Samuel D. Ingham	1829	John H. Eaton	1829	John Branch	1829			W. T. Barry	1829	J. M. Berrien	1829
Andrew Jackson	1833	Martin Van Buren	1833	Ed. Livingston	1831	Louis McLane	1831	Lewis Cass	1831	L. Woodbury	1831			Amos Kendall	1835	R. B. Taney	1831
				Louis McLane	1833	William J. Duane	1833			M. Dickerson	1834					B. F. Butler	1834
				John Forsyth	1834	Roger B. Taney	1833										
						Levi Woodbury	1834										
Martin Van Buren	1837	R. M. Johnson	1837	John Forsyth	1837	Levi Woodbury	1837	J. R. Poinsett	1837	M. Dickerson	1837			Amos Kendall	1837	B. F. Butler	1837
										J. K. Paulding	1838			John M. Niles	1840	Felix Grundy	1838
																H. D. Gilpin	1840
Wm. H. Harrison	1841	John Tyler	1811	Daniel Webster	1841	Thomas Ewing	1841	John Bell	1841	Geo. E. Badger	1841			Francis Granger	1841	J. J. Crittenden	1841
John Tyler	1841			Hugh S. Legare	1843	Walter Forward	1841	John C. Spencer	1841	Abel P. Upshur	1841			C. A. Wickliffe	1841	H. S. Legare	1841
				Abel P. Upshur	1843	John C. Spencer	1843	James M Porter	1843	David Henshaw	1843					John Nelson	1844
				John Nelson	1844	George M. Bibb	1844	Wm. Wilkins	1844	T. W. Gilmer	1844						
				John C. Calhoun	1844					John Y. Mason	1844						
James Knox Polk	1845	George M. Dallas	1845	James Buchanan	1845	Robt. J. Walker	1845	W. L. Marcy	1845	Geo. Bancroft	1845			Cave Johnson	1845	J. Y. Mason	1845
										John Y. Mason	1846					N. Clifford	1846
																Isaac Toucey	1848
Zachary Taylor	1849	Millard Fillmore	1849	John M. Clayton	1849	W. M. Meredith	1849	G. W. Crawford	1849	Wm. B. Preston	1849	Thomas Ewing	1849	Jacob Collamer	849	R. Johnson	1849
Millard Fillmore	1850			Daniel Webster	1850	Thomas Corwin	1850	Winfield Scott	1850	Wm. A. Graham	1850	A. H. H. Stuart	1850	Nathan K. Hall	1850	J. J Crittenden	1850
				Edward Everett	1852			Chas. M. Conrad	1850	J. P. Kennedy	1852			S. D. Hubbard	1852		
Franklin Pierce	1853	Wm. R. King	1853	Wm. L. Marcy	1853	James Guthrie	1853	Jefferson Davis	1853	James C. Dobbin	1853	R. McClelland	1853	James Campbell	1853	Caleb Cushing	1853
James Buchanan	1857	J. C. Breckinridge	1857	Lewis Cass	1857	Howell Cobb	1857	John B. Floyd	1857	Isaac Toucey	1857	J. Thompson	1857	Aaron V. Brown	1857	J. S. Black	1857
				Jeremiah S. Black	1860	Philip F. Thomas	1860	Joseph Holt	1860					Joseph Holt	1859	E. M. Stanton	1860
						John A. Dix	1861							Horatio King	1861		
Abraham Lincoln	1861	Hannibal Hamlin	1861	Wm. H. Seward	1861	Salmon P. Chase	1861	S. Cameron	1861	Gideon Welles	1861	Caleb B. Smith	1861	Montg. Blair	1861	Edw. Bates	1861
						W. P. Fessenden	1864	E. M. Stanton	1861			John P. Usher	1863	Wm. Dennison	1864	James Speed	1864
						Hugh McCulloch	1865					James Harlan	1865				
Abraham Lincoln	1865	Andrew Johnson	1865					Ulysses S. Grant	1867			O. H. Browning	1866	A. W. Randall	1866	H. F. Stanbury	1866
Andrew Johnson	1865							Lorenzo Thomas	1868							O. H. Browning	1868
								J. M. Schofield	1868							W. M. Evarts	1868
Ulysses S. Grant	1869	Schuyler Colfax	1869	E. B. Washburn	1869	Geo. S. Boutwell	1869	J. M. Schofield	1869	Adolph E. Borie	1869	J. D. Cox	1869	J. A. J. Creswell	1869	E. R. Hoar	1869
Ulysses S. Grant	1873	Henry Wilson	1873	Hamilton Fish	1869	W. A. Richardson	1873	J. A. Rawlins	1869	G. W. Robeson	1869	C. Delano	1870	Jas. W. Marshall	1874	A.T. Ackerman	1870
						Benj. H. Bristow	1874	W. W. Belknap	1869			Zach. Chandler	1875	Marshall Jewell	1874	E.S. Pierrepont	1875
						L. M. Morrill	1876	Jas. D. Cameron	1876					Jas. N. Tyner	1876	G. H Williams	1876
																A. Taft	1876
Rutherford B. Hayes	1877	Wm. A Wheeler	1877	Wm. M. Evarts	1877	John Sherman	1877	G. W. McCrary	1877	R. W. Thompson	1877	Carl Schurz	1877	D. M. Keys	1817	H. Devens	1877
										Nathan Goff, Jr.	1881						
James A. Garfield	1881	Chester A. Arthur	1881	James G. Blaine	1881	William Windom	1881	Robt. T. Lincoln	1881	Wm. H. Hunt	1881	S. J. Kirkwood	1881	Thomas L. James	1881	W'ne MacVeagh	1881
Chester A. Arthur	1881			F.T. Frelinghuysen	1881	Charles J. Folger	1881			Wm. E. Chandler		Henry M. Teller		Timothy O. Howe	188	B. H. Brewster	1881
						Hugh McCulloch	1884							Walter Q Gresham	1883		
Grover Cleveland	1885	T. A. Hendricks	1885	T. F. Bayard	1885	Daniel Manning	1885	W. C. Endicott	1885	W. C. Whitney	1885	L. Q. C. Lamar	1885	W. F. Vilas	1885	A. H. Garland	1885
						Charles S. Fairchild	1886										
Benjamin Harrison	1889	Levi P. Morton	1889	J. G. Blaine	1889	William Windom	1889	Redfield Proctor	1889	Benj. F. Tracy	1889	John W. Noble	1889	J. Wanamaker	1889	W. H. H. Miller	1889
						Charles Foster	1891	S. B. Elkins	1891								
								Agricultural Department, created 1889, Jerry Rusk, Secretary									

The Presidents of the United States, Ancestry, Native State—Politics and Place of Death, is shown by the accompanying table.—

	NAME.	Native State.	Ancestry.	Year of Birth	Residence	Inaugurated. Yr.	Inaugurated. Age	Years Served.	Politics.	Place of Death.	Age at Death.
1	George Washin'n	Va.	English	1732	Va.	1789	57	8	Federalist	Mount Vernon, 99	67
2	John Adams	Mass.	English	1735	Mass.	1797	62	4	Federalist	Quincy, Mas., 1826	91
3	Thomas Jefferson	Va.	Welsh	1743	Va.	1804	58	8	Republic'n*	Monticello, Va. '26	83
4	James Madison	Va.	English	1751	Va.	1809	58	8	Republican.	Montpelier, Va. '36	85
5	James Monroe	Va.	Scotch	1758	Va.	1817	59	8	Republican.	N. Y. City, 1831	73
6	John Q. Adams	Mass.	English	1767	Mass.	1825	58	4	Republic'n.‡	Washington, 1848	81
7	Andrew Jackson	S. C.	Scot.-Irish.	1767	Tenn.	1829	62	8	Democrat	Her'ge, Tenn., 1845	78
8	Martin Van Buren	N. Y.	Dutch	1782	N. Y.	1837	55	4	Democrat	Kind'h'k, N.Y., '62	80
9	Wm. H. Harrison	Va.	English	1773	Ohio	1841	58	1 mo.	Whig	Washington, 1841	68
10	John Tyler	Va	English	1790	Va.	1841	51	4	Democrat	Richmond, Va., '62	72
11	James K. Polk.	N. C.	Scot.-Irish.	1795	Tenn.	1845	60	4	Democrat	Nashv'le, Tenn. '49	54
12	Zachary Taylor	Va	English	1784	La	1849	55	1	Whig	Washington, 1850	66
13	Millard Fillmore.	N. Y	English	1800	N. Y.	1850	50	3	Whig	Buffalo, N Y., 1874	74
14	Franklin Pierce	N. H.	English	804	N. H.	1853	49	4	Democrat	Concord, N.H., '69	65
15	James Buchanan	Pa.	Scot.-Irish.	1791	Pa.	1857	66	4	Democrat.	Wheatl'd, Pa., '68	77
16	Abraham Lincoln	Ky	English	1809	Ill.	1861	52	4	Republican.	Washington, 1865	56
17	Andrew Johnson	N. C.	English	1808	Tenn.	1865	57	4	Republican.	Greenv'e, Tenn. '75	67
18	Ulysses S. Grant.	Ohio.	Scotch	1822	Ill	1869	47	8	Republican.	M.M'Greg'r N Y '85	63
19	Ruthe'd B. Hayes	Ohio.	English	1822	Ohio	1877	55	4	Republican.		
20	James A. Garfield	Ohio	English	1831	Ohio	1881	49	6½ mo.	Republican.	L'g Br'nch, N.J. '81	50
21	Chester A. Arthur	Vt	Scot.-Irish.	1830	N. Y	1881	51	3y5½ mo	Republican.	N. Y. City, 1886	56
22	Grover Cleveland	N. J.	English	1837	N. Y.	1885	48	4	Democrat.		
23	Benj. Harrison	Ohio.	English.	1833	Ind.	1889			Republic'n		

*The Democratic Party of to-day claims lineal descent from the first Republican Party and President Jefferson as its founder. ‡Political parties were disorganized at the time of the election of John Quincy Adams. He claimed to be republican but was mainly supported by old federalists. The opposition to his administration, composed mostly of republicans, took the name of democrats and elected Jackson president.

The age and graves of the Presidents are given below:—

NAME.	Age.	Graves.	NAME.	Age.	Graves.
Geo. Washington	67	Mt. Vernon, Va.	Zachary Taylor	66	Frankfort Ky.
John Adams	91	Quincy, Mass	Millard Fillmore	74	Buffalo, N. Y.
Thomas Jefferson	83	Monticello, Va	Franklin Pierce	65	Concord, N. H.
James Madison	85	Montpeliar, Va	James Buchanan	77	Wheatland, Pa.
James Monroe	73	Richmond, Va	Abraham Lincoln	56	Springfield, Ill.
J. Q. Adams	81	Quincy, Mass	Andrew Johnson	67	Jonesboro, Tenn.
Andrew Jackson	78	Hermitage, Tenn	Ulysses S. Grant	63	New York,
Martin Van Buren	80	Kinderhook, N. Y.	Rutherford B Hayes.	b 1822	
Wm. H. Harrison	68	North Bend, O.	James A. Garfield	50	Cleveland, O.
John Tyler	72	Richmond, Va	Chester A. Arthur	56	New York
James K. Polk	54	Nashville, Tenn	Grover Cleveland	b.1837	

PRESS.—Obscene Literature. The United States revised statutes, sec. 2,491, prohibits the importation from any foreign country of any obscene book, pamphlet, drawing or other representation, figure or image, on or of paper or other material, or any instrument or drug for any immoral purposes. By sec. 3,878 all obscene publications, etc., are excluded from the mails. By sec. 3,893 any person who shall knowingly take out from the mails any such things for the purpose of circulation or distribution shall be guilty of misdemeanor, punishable by fine and imprisonment. Any officer, sec. 1,785, agent or employee of the government who violates laws against obscene literature, etc., is guilty of misdemeanor.

PRESS. See *Newspapers.*

PRINTING AND PUBLISHING. The United States Census (1880) gives 3467 establishments; capital 63 million dollars; 58,478 hands employed. Value of products $90,700,000.

PRISONERS. The following table gives the number of prisoners received at Andersonville, Ga., during the Civil War. The first detachment of prisoners was received Feb. 15, 1864. Total number of prisoners received, 49,485. Largest number imprisoned at one date (Aug. 9, 1864). 33,006.

Total No. Deaths { In hospital....8,735
In stockade....3,727–12,462
Average number of deaths per month, for the 13 months....958
Largest number of deaths in one day (Aug. 23, 1864)....97
Number of escapes....328

PRINCIPAL DISEASES RESULTING IN DEATH.

Diarrhœa	3,952	Pneumonia	221	Rheumatism	83
Scurvy	3,574	Debility	198	Varioloid	63
Dysentery	1,648	Intermittent and remi't f's.	177	Gangrene	63
Unknown	1,268	Gunshot Wounds	149	Catarrh	55
Anasarca	377	Pleurisy	109	Ulcers	51
Typhoid Fever	239	Bronchitis	93	Phthisis	36

PRISONS. See *Penitentiaries.*

PROFESSIONS. See diagram, page 39.

PUBLIC BUILDINGS. See *Buildings.*

PUBLIC DEBTS. See *Debts.*

PUBLIC LANDS. The public lands of the United States which are still undisposed of and open to settlement lie in nineteen States and eight Territories. In each case, except Ohio, Indiana, Illinois, the Indian Territory and Alaska, land offices are established, in charge of an officer known as the Register of the Land Office, where the records of all surveyed lands are kept, and all applications concerning lands in each district are filed and inquiries answered. The public lands are divided into two great classes. The one class have a dollar and a quarter an acre designated as the minimum price and the other two dollars and a half an acre, the latter being the alternate sections, reserved by the United States in land grants to railroads, etc. Titles to these lands may be acquired by private entry or location under the homestead, pre-emption and timber-culture laws; or, as to some classes by purchase for cash, in the case of lands which may be purchased at private sale, or such as have not been reserved under any law. Such tracts are sold on application to the Land Register, who issues a certificate of purchase, the receiver giving a receipt for the money paid, subject to the issue of a patent, or complete title, if the proceedings are found regular by the Commissioner of the General Land Office, at Washington. See *Land Grants;* also *Homestead Laws.*

PUBLIC WORKS. The value of the Public Works of the principal nations, including Roads, Canals, Streets, Sewers, Public Buildings, Fortifications, Arsenals, with the total value and ratio per inhabitant:

COUNTRIES.	VALUE IN MILLION DOLLARS.					Ratio per Inhabitant.
	Roads and Canals.	Streets, Drains, etc.	Public Buildings.	Fortific'ns, Arsenals, Etc.	Total.	
United States	870	230	695	840	2,635	$50
Great Britain	810	340	570	1,015	2,735	75
France	1,485	170	475	820	2,950	80
Germany	1,050	185	365	610	2,210	50
Russia	380	130	220	390	1,120	15
Austria	400	65	195	280	940	25
Italy	110	115	165	265	655	22½
Spain	50	50	85	115	300	20
Portugal	10	10	20	35	75	20
Belgium	50	40	35	80	205	40
Holland	115	30	30	450	625	165
Denmark	15	10	10	20	55	30
Sweden and Norway	125	15	20	65	225	35
Switzerland	70	15	20	45	150	55
Greece	10	5	10	10	35	20
Canada	55	15	30	50	150	35
Australia	40	20	30	50	140	50
Argentine Republic	5	5	10	10	30	15
Mexico	15	10	25	10	60	5
Total	5,665	1,460	3,010	5,160	15,295	$40

See diagram *Internal Improvements*, page 43.

PUBLIC SCHOOLS. See *Education;* also *Schools.*

PULSE. Nominally, the number of pulsations of human beings per minute differs at different periods of life. At birth it is about 135. At the age of seven from 80 to 85. In adults 70 to 75. In old age 50 to 65. In females the pulse is quicker than in males.

The pulsations in animals per minute is:—

The Horse	32 to 38	Dog	90 to 100
An Ox or Cow	25 to 42	Cat	110 to 120
A Sheep	70 to 79	Rabbit	120
The Ass	48 to 54	Guinea Pig	140
Goat	72 to 76	Hen	140

See *Blood.*

PYRAMIDS. The most important are those of India, Mexico and Egypt. Those of the latter country are 70 in number and of different sizes. The largest, that of Cheops, occupied the labors of 100,000 men 20 years, 10 years having been previously consumed in building the inclined way 50 yards wide and 40 feet high and 8 miles long, to carry the stone from the quarries to Gizeh. 6,800,000 tons of stone were used in its construction.

QUARRIES. The quarrying industries of the United States (1880) show 1,525 establishments; capital, $25,414,497; producing 115,380,133 cubic feet, valued at $18,356,055; employing 39,723 laborers; 10,000 animals; 3,685 wagons; 265 vessels; 651 cars and 5 locomotives. The value of rock quarried was: Limestone and Marble, $6,856,681; Sandstone, $4,780,391; Crystalline Silicious Rocks, $5,188,998; Slate, $1,529,985. See Marble.

QUICK PASSAGE. See *Fast Time.*

QUININE. See *Chinchona.*

RAILROADS. See diagram, page 39.

RAILROADS, PACIFIC. See *Pacific Railroads.*

RAILROAD ACCIDENTS in the United States. The following statistics of accidents on railways for 10 years past are a record of accidents to trains only—not of all railway accidents. The larger number killed or injured on railways are those crossing or walking on the tracks, or falling from trains in motion, and without any accidents to trains themselves. But these latter are not reported.

YEARS.	Number Railway Accidents.	Number Killed.	Number Injured.	PER 100 ACCIDENTS.	
				Killed.	Injured.
1873	1,283	276	1,172	21.5	90.1
1874	980	204	778	20.8	79.4
1875	1,201	234	1,107	19.5	92.2
1876	982	323	1,907	33.4	111.7
1877	891	214	1,047	24.0	117.5
1878	740	204	756	37.6	102.2
1879	910	185	709	20.3	78.0
1880	1,078	315	1,172	29.2	108.7
1881	1,458	414	1,597	28.4	109.0
1882	1,365	380	1,588	27.5	116.8
1883	1,640	474	1,954	29.2	120.7
1884	1,191	389	1,760	32.6	147.6
1885	1,217	307	1,530	25.2	125.7

RAILROAD COMMISSIONERS. Railway Commissions invested with greater or less powers have been created by law in twenty-six States of the Union up to 1885, leaving twelve States only unprovided with such officers.

The States having Railroad Commissioners are as follows, with the number constituting the Commission in each:

Alabama, 3; Arkansas, 3; California, 3; Colorado, 1; Connecticut, 3; Georgia, 3; Illinois, 3; Iowa, 3; Kansas, 3; Kentucky, 3; Maine, 3; Massachusetts, 3; Michigan, 1; Minnesota, 3; Mississippi, 3; Missouri, 3; Nebraska, 3; New Hampshire 3; New York, 3; Ohio, 1; Rhode Island, 1; South Corolina, 3; Texas, 1; Vermont, 1; Virginia, 1; and Wisconsin, 1.

In some of these States the commissioners are merely examining and reporting officers; in others the commissioners have purely advisory powers, the legislatures retaining the sole power of regulation of railways by statute; in others still, the commissions are invested with power to fix rates of freight and fares. The States in which railway commissioners have power to fix rates are nine in number, viz., California, Georgia, Illinois, Kansas, Maine, Mississippi, Missouri, New Hampshire, and South Carolina. See *Inter-State Commerce.*

RAILWAY STATISTICS. The summary statistics of the United States railroads in 1885, averages, is as follows:—

For each 100 miles of railroad operated in the United States there are 21.03 locomotives; 14.02 passenger cars; 5.30 baggage, mail and express cars; and 653 freight cars of all kinds.

The capital stock aggregates to each mile of completed road, $29,867.
Bonded debt to each mile of completed road, $29,453.
Total cost of construction and equipment each mile, $55,059.
Gross earnings per mile of road in operation, $6,265.
Net earnings per mile of road in operation, $2,185.
Interest paid on bonds per mile of completed road, $1,406.73.
Dividends paid on stock per mile of completed road, $608.10.
Ratio of interest paid to total funded debt, 4.77 per cent.
Ratio of dividends to aggregate capital stock, 2.02 per cent.
Average fare per mile, 2.20 cents.
Average freight charge per ton, 1.05 cents per mile.
Total number of passengers transported in 1885, 351,427,088.
Total freight transported on all railroads in 1885, 437,040,099 tons.

RAILWAY SIGNAL CODE. One pull of the bell-cord signifies "stop;" two pulls means "go ahead;" three pulls denotes "back up." One whistle denotes "down brakes;" two whistles means "off brakes;" three whistles signifies "back up." Continued whistles indicates "danger." Rapid short whistles "a cattle alarm." A sweeping parting of the hands on the level with the eyes, signifies "go ahead." Downward motion of the hands with extended arms signifies "stop." Beckoning motion of one hand signifies "back." A sweeping motion of the hands over the head denotes "back slowly." Red flag waved up the track, signifies "danger." Red flag stuck up by the roadside, signifies "danger ahead." Red flag carried on a locomotive signifies "an engine following." Red flag hoisted at a station, is a signal to "stop." Lanterns at night raised and lowered vertically, is a signal "to start." Lanterns swung at right angles across the track means "stop." Lanterns swung in a circle, signifies "back the train."

RAINFALL. The average annual rainfall as published by the Smithsonian Institution, Washington, D. C., in the United States is shown by the following table:

	Inches.		Inches.		Inches.
Baltimore, Md	41 10	Fort Marcy, N. M	16 65	New Bedford, Mass	41.42
Baton Rouge, La	60.16	Fort Massachusetts, Col	17.06	New Haven, Conn	44.43
Boston, Mass	44.99	Fort Myers, Fla	56 55	New Orleans, La	51 05
Buffalo, N. Y	33.84	Fort Randall, Dak	16 51	New York, N. Y	43 24
Burlington, Vt	34.15	Fort Smith, Ark	40.38	Penn Yan, N. Y	28.42
Brunswick, Me	44 68	Fort Snelling, Minn	25.11	Peoria, Ill	35 83
Charleston, S. C	43.63	Fort Townsend, I. T	57.08	Philadelphia, Pa	44.05
Cleveland, Ohio	37 61	Fort Vancouver, Wash T	38 84	Pittsburgh, Pa	37 09
Cincinnati, Ohio	44.87	Fortress Monroe, Va	47.04	Providence, R. I	41.54
Dalles, Or	21.74	Gaston, N. C	43.40	Richmond, Ind	43.32
Detroit, Mich	30.05	Hanover, N. H	40.32	Sacramento, Cal	19.58
Fort Bliss, Texas	9.56	Huntsville, Ala	54 88	Salt Lake, Utah	23.85
Fort Bridger, Utah	6.12	Key West, Fla	36 23	San Francisco, Cal	21.09
Fort Brown, Texas	33.44	Mackinac, Mich	23 96	San Diego, Cal	9.16
Fort Colville, Wash. T	9 83	Marietta, Ohio	42.70	Savannah, Ga	48.32
Fort Craig, N. M	11.67	Meadow Valley, Cal	57.03	Sitka, Alaska	83 39
Fort Defiance, Arizona	14.21	Memphis, Tenn	45.46	Springdale, Ky	48.58
Fort Garland, Col	6 11	Milwaukee, Wis	30 40	St. Louis, Mo	42.18
Fort Gibson, I. T	36 37	Muscatine, Ia	42 88	Washington, Ark	54.50
Fort Hoskins, Or	56 71	Mt. Vernon Arsenal, Ala	66.14	Washington, D. C	37.52
Fort Kearney, Neb	25.25	Natchez, Miss	53.55	White Sulphur Springs, Va	37.54
Fort Laramie, Wy	15.16	Neah Bay, Wash T	123 35		
Fort Leavenworth, Kan	31.74	Newark, N. J	44.85		

AVERAGE ANNUAL RAIN FALL IN EUROPE.

	Inches.		Inches.		Inches.
Aberdeen, Scotland	28 87	Dublin, Ireland	21.01	Mannheim, Germany	22.47
Bergen, Norway	88.61	Geneva, Switzerland	31.07	Marseilles, France	23.04
Berlin, Prussia	23 56	Glasgow, Scotland	21 33	Milan, Italy	38.01
Bordeaux, France	34.00	Limerick, Ireland	35 00	Naples, Italy	29 64
Brussels, Belgium	28 06	Lisbon, Portugal	27 01	Paris, France	22 64
Coimbra, Portugal	118.08	Liverpool, England	34.05	Rome, Italy	30.86
Cork, Ireland	40.02	London, England	24 04	Stockholm, Sweden	20 04
Copenhagen, Denmark	18.35	Manchester, England	36 02	St Petersburgh, Russia	17.03

REFORM SCHOOLS. See *Reforms.*

RELIGIOUS STATISTICS. See Diagram, page 27.

RETAIL Prices of the Necessaries of Life. See *Wages.*

REVENUE. See Diagrams, page 23.

RIBBONS. The value manufactured has been as follows, (thousands omitted:)

	1872	1861
France	$24,600	$25,080
Germany	14,050	12,100
Switzerland	12,950	11,150
Austria	4.600	3,550
Great Britain	4,000	4,000
United States	500	17,150
Other countries	2,000	4,500
Total	$62,700	$77,530

In France the chief seats of the ribbon trade seems to be Paris, Tours, Lyons and Avignon. In England the headquarters are Coventry.

The ribbon-loom first appeared at Dantzic in 1586, and its inventor is said to have been strangled.

RICE. The world's production in tons by countries is: India, 16,800,000; Japan, 3,450,000; Java, 2,740,000; Manilla, 1,800,000; Italy, 710,000; Ceylon, 480,000; United States, 90,000; Spain, 80,000.

RIOTS. The following are some of the most noted:—

1262. Goldsmith's and tailor's riots in the streets of London; 13 hanged.

1346. Citizens of Mayence burn alive 12,000 Jews.

1628. Dr. Lamb killed by the mob.

1715. Whig and Tory mobs, called Ormond and Newcastle mobs. Mughouse riot, 1716.

1736. Spitalfields weavers against workmen from Ireland; many lives lost. Again, 1765, Duke of Bedford barely escaped; others killed.

1780. Lord George Gordon fires London in 36 quarters; 285 rioters killed by troops. Gordon died in Newgate prison, 1793.

1791. Riot in Birmingham, on account of celebrating the French revolution; houses destroyed.

1810. In Piccadilly on account of sending Francis Burdett to the tower.

1811-12. Machinery destroyed at Nottingham, in north of England, and at Sheffield.

1815. Riot at Westminster on account of Corn bill.

1815. A riot at Dartmoor depot, in stopping which seven American prisoners were killed; 35 injured.

1819. Theater Royal, Dublin, for several nights.

1838. Chartist riots throughout England.

1849. Riot at Dolly's Brae, near Castlewellan, Ireland, between Orangemen and Roman Catholics; a few of the latter killed and their houses destroyed.

1851. Riots caused by Orangemen procession at Liverpool.

1852. Church riots, at Belfast, Ireland.

1855. Bread riots at Liverpool and Hyde Park, London.

1862. Orange celebration and riots at Belfast.

1862. Irish oppose the friends of Garibaldi, at Hyde Park, London; riots elsewhere for same reason.

1863. Draft riots in New York; colored citizens beaten, one hanged and burned; Colored Orphan Asylum worth $200,000 burned; stores sacked, and property valued at $2,000,000 destroyed. Colonel O'Brien beaten to death July 14. Rioters finally scattered by regular troops under Captain Putnam, of the 12th regiment.

1864. Riots between Romanists and protestants at Belfast; nine killed, many wounded.

1867. Anti-Popery riots at Birmingham on account of Murphy lectures.

1868. Collier's strike at Wigan.

1872. Riots at belfast.

1874. At Northampton for failure to elect Charles Bradlaugh, M. P.

1849. Rivalry between Forrest and Macready, the tragedians at Astor Place, New York; lives lost.

1871. Orange riots between Catholic and Protestant Irish in New York; 62 killed.

1877. Railroad riots that began on Baltimore and Ohio Railroad.

1877. Railroad riots in Chicago; 15 killed, 100 wounded. Women participated in the fight.

1877. Railroad riots at Pittsburg; many killed.

1882. Rioters in Russia destroy Jewish property worth $80,000,000; at Warsaw 900 shops sacked.

1882. Riots at Alexandria; 460 Europeans killed by Arabs, and city burnt. The indemnities awarded to 9,100 claimants summed up $46,000,000, of which 31 per cent to Greeks, 24 per cent to Italians, and 5 per cent to English.

1884. Riot in Cincinnati, Ohio; many killed and wounded, March 28.

1885. Serious trouble at Chicago, Ill., in early part of July, on account of street car conductor's and drivers' strike; several killed and many wounded.

1886. Serious Anarchists riot at Haymarket Square, Chicago, May 4—death of 7 police and wounding of many others. Eight Anarchists tried for murder—seven sentenced to death and one to 15 years imprisonment.

RIVERS. *The longest.* See Diagram, page 50.

ROADS. The highways of nations are shown in the accompanying table:—

	Miles (Thousands.)				Miles of Way.	
	Roads.	Railways.	Waterways.	Total.	Per 10,000 Inhab.	Per 100 Sq. Miles.
United States	260	104	21	385	75	10
Great Britain	142	18	5	165	51	140
France	238	18	8	264	70	130
Germany	265	21	17	303	67	150
Russia	65	15	22	102	13	5
Austria	66	12	3	81	22	30
Italy	74	5	2	81	28	72
Spain and Portugal	16	8	2	24	12	11
Belgium	5	3	1	9	17	80
Holland	8	1	1	5	13	25
Denmark	2	1	..	8	16	21
Sweden	35	4	1	40	90	24
Norway	14	1	..	15	80	12
Canada	6	8	4	18	42	⅓
India	58	11	5	74	3	5
Total	1,249	228	92	1,569	28	12

RYE. This valuable crop is worth 1,160 million dollars, and feeds 180 millions of people, and a total production of 1,408 million bushels. Russia produces yearly 680 million bushels; Germany 240; Austria, 130: France, 80; Italy and Spain, 68; Scandinavia; 40; United States, 31; Roumania, 24; other countries, 87 million bushels. See *Agricultural Products.*

SADDLERY AND HARNESS. In 1880 there were 7,999 establishments in the United States with capital $16,500,000, employing 21,446 hands. Value of production $38,000,000. Great Britain annually exports to the value of $2,330,000.

SAILING VESSELS. See *Shipping.*

SALMON. The salmon fishing of the Pacific coast yields annually nearly 20 million pounds. Six million pounds are consumed in California, the balance exported; one half goes to England, one-fourth to Continental Europe, and the rest to New York. Great Britain's annual fishing yields 3,600 tons, valued at $1,960,000, more than one-half of which is consumed in London. England imports 150 tons annually from Norway.

SALARIES. The salaries of the principal officers of the government of the United States are:—

President of the United States, per annum, $50,000.

Vice-President of the United States, per annum, $8,000.

Cabinet Ministers, per annum, $8,000.

Chief Justice Supreme Court, per annum, $10,500.

Justices of the Supreme Court, per annum, $10,000.

Senators and Representatives in Congress, with mileage, per annum, $5,000.

Speaker, House of Representatives, with mileage, per annum, $8,000.

Secretary of the Senate, per annum, $5,000.

Clerk, House of Representatives, per annum, $5,000.

Assistant Secretaries of Departments, per annum, $3,500 to $4,500.

Heads of Bureaus, per annum, $3,000 to $5,000.

Superintendent Coast Survey, per annum, $6,000.

Judges, District of Columbia, per annum, $4,000.

Secretary, Smithsonian Institution, per annum, $4,000.

Ministers Plenipotentiary to Great Britain, France, Germany and Russia per annum, $17,500.

Ministers Plenipotentiary to Spain, Austria, China, Italy, Mexico, Brazil and Japan, per annum, $12,000.

Ministers Resident and Plenipotentiary to Chili, Peru, Central American States, per annum, $10,000.

Ministers Resident to Belgium, Netherlands, Sweden and Norway, Turkey, Hawaiian Islands, Hayti, Columbia, Venezuela, Argentine Republic and Greece, per annum, $7,500.

Ministers Resident to Denmark, Switzerland, Bolivia, Paraguay and Uraguay $5,000.

Minister Resident to Liberia, $4,000.

Interpreter and Secretary of Legation to China, per annum, $5,000.

Dragoman and Secretary of Legation to Turkey, per annum, $3,000.

Consul General to Cairo, per annum, $4,000.

Consul General to London, Liverpool, Paris, Havana and Rio Janeiro, per annum, $6,000.

Consul General to Calcutta and Shanghai, per annum, $5,000.

Consul General to Melbourne, per annum, $4,500.

Consul General to Kanagawa, Honolulu, Montreal and Berlin, per annum, $4,000.

Consul General to Vienna, Frankfort, Rome, Constantinople, Halifax and Bangkok, per annum, $3,000.

Consul General to St. Petersburgh and Mexico, per annum, $2,000.

Charge d'Affairs to Portugal, $5,000; to Roumania, $4,000.

Secretaries of Legation, from $1,500 to $2,625.

Consuls from $1,000 to $7,000.

The Postmasters, Collectors of Revenue, Territorial Governors and Judges and other officers employed throughout the country, are too numerous to be designated in this place.

SALT. The principal salt fields of the United States are in New York, Michigan and Virginia, though salt is manufactured in 15 states and territories. The census of 1880 gives 264 establishments with a capital of $8,225,740; employing nearly 5,000 hands, paying $1,260,023 for wages annually; producing 29,800,298 bushels valued at $4,817,636; distributed as follows:

	Number of Establishments.	Capital Employed.	Bushels of Salt Produced.	Total Value of Salt Produced.
California	25	$ 365,650	884,443	$ 121,950
Kentucky	3	20,500	83,000	21,950
Massachusetts	6	9,000	9,975	3,950
Michigan	86	2,147,209	12,425,885	2,271,913
New York	69	2,286,081	8,748,203	1,106,740
Ohio	25	832,600	2,650,301	363,791
Pennsylvania	16	234,500	851,450	177,415
Utah	10	13,400	483,800	60,180
Virginia and West Virginia	11	1,909,500	3,105,333	508,047
Other States	13	407,300	557,908	181,700
Total U. S.	264	$8,225,740	29,800,298	$4,817,636

Great Britain consumes 80; France, 50; United States, 39; Germany, 25; Russia, 19 pounds per inhabitant. It is claimed that a reduced death rate and a higher efficiency of women are the results of the greater consumption of salt.

Salt in Sea Water. The percentage of salt in various seas is: Caspian, 0.5; Black, 1.2; Baltic, 1.3; English Channel, 3.3; Mediterranean, 3.9; Atlantic Ocean, 3.7; Red Sea, 4.3; Dead, 8.5.

SAVINGS BANKS. The following table shows the total number of depositors the percentage of depositors to population, total amount on deposit and amount per inhabitant, January 1, 1887:—

COUNTRIES.	Thousands Omitted. No. of Depositors.	Thousands Omitted. Total Amount of Deposits.	Depositors. Per Cent to Population	Amount per Inhabitant.
United States	3,159	$1,141,531	18.3	$21.82
Great Britain	3,715	402,000	10.6	10.97
France	3,900	306,000	10 3	8.05
Germany	4,200	526,000	9 4	1.15
Russia	200	16,000	0 3	24
Austria	1,850	425,500	6.4	11.22
Italy	1,970	168,000	6 8	5.85
Switzerland	1,080	61,000	35 3	21.46
Spain	250	12,000	1.5	73
Belgium and Holland	310	36,500	3.3	3.92
Norway and Sweden	1,600	136,500	18 1	16.34
Total	22,234	$3,231,031	12.3	$10.05

POST OFFICE SAVINGS BANK OF CANADA.

Post Office Savings Banks in Ontario and Quebec are open daily for the receipt and repayment of deposits, during the ordinary hours of Post Office business.

The direct security of the Dominion is given by the Statute for all deposits made.

Any person may have a deposit account, and may deposit yearly any number of dollars from $1 up to $300, or more with the permission of the Postmaster General.

Deposits may be made by married women, and deposits so made, or made by women who shall afterwards marry, will be repaid to any such woman.

Deposits for children under 10 years of age may be made—

Firstly—By a parent or friend as trustee for the child, in which case the deposits can be withdrawn by the trustee until the child shall attain the age of 10 years, after which time repayment will be made only on the joint receipts of both trustee and child.

Secondly—In the child's own name—and, if so deposited, repayment will not be made until the child shall attain the age of ten years.

A depositor in any of the Savings Bank Post Offices may continue his deposits at any other of such offices, without notice or change of Pass Book, and can withdraw money at that Savings Bank Office where most convenient to him.

Each depositor is supplied with a Pass Book, which is to be produced to the Postmaster every time the depositor pays in or withdraws money, and the sums paid in or withdrawn are entered therein by the Postmaster receiving or paying the same.

Each depositor's account is kept in the Postmaster General's office in Ottawa, and in addition to the Postmaster's receipt in the Pass Book, a direct acknowledgment from the Postmaster General for each sum paid in is sent to the depositor. If this acknowledgment does not reach the depositor within ten days from the date of his deposit he must apply immediately to the Postmaster General by letter, being careful to give his address, and, if necessary, write again, because the Postmaster's receipt, or entry in the Pass Book is not sufficient without the further receipt for the money from Ottawa.

Every depositor must send his book once a year, viz.: on the anniversary of his first deposit, for comparison with the books of the Department, and for insertion of interest. This book will be returned to him by next mail. At no other time should a depositor suffer his book to be out of his own possession.

When a depositor wishes to withdraw money he can do so by applying to the Postmaster General who will send him by return mail a cheque for the amount, payable at whatever Savings Bank Post Office the depositor may have named in his application.

Interest at the rate of 4 per cent. per annum is allowed on deposits, and the interest is added to the principal on the 30th of June in each year.

SCHOOLS of the United States.

UNIVERSITIES AND COLLEGES.—364, with 4,160 instructors, and 59,594 students, as follows: Preparatory departments, 694 instructors, and 26,138 students; collegiate departments, 3,466 instructors, and 32,553 students; 903 students unclassified. Volumes in college libraries, 2,342,766; in society libraries, 459,372. Value of grounds, buildings and apparatus, $39,623,424; productive funds, $43,431,520; income from these funds, $3,014,048; tuition fees, $1,881,360; State appropriations, $418,159. Aggregate scholarship funds, $2,299,519.

COLLEGIATE DEGREES.—In course, 10,114; honorary, 372; distributed as follows: Letters, in course, 3,766 honorary, 121; science, in course, 923; honorary, 9; philosophy, in course, 280; honorary, 30; art, in course, 42; honorary, 3; theology, in course, 266; honorary, 134; medicine, in course, 3,501; honorary, 10; law, in course, 1,041, honorary, 65; not specified, 295. Classical and scientific colleges conferred in course, 6,704 degrees; colleges for women, 867; professional schools, 2,543.

SCHOOLS OF SCIENCE.—83 schools (including 46 endowed by land grant, 1862, and U. S. Naval and Military Academies) with 953 instructors, and 11,584 students. Value of grounds, buildings and apparatus, $9,746,661; productive funds, $10,653,498; income from productive funds, $670,544; tuition fees, $167,722; State appropriations, $299,216; aggregate scholarship funds, $1,137,482.

SCHOOLS OF LAW.—48; instructors, 229; students, 3,134; volumes in libraries, 88,712; value of grounds and buildings, $95,000; productive funds, $165,457; yielding, $16,092; tuition fees, $152,393.

SCHOOLS OF THEOLOGY.—142; instructors, 633; students, 5,242; endowed professorships, 258; volumes in libraries, 722,143; value of grounds and buildings, $6,221,607; productive funds, $8,537,683; having income, $576,897.

SCHOOLS OF MEDICINE, DENTISTRY AND PHARMACY.—120; instructors, 1,660; students, 14,006. Regular schools of medicine and surgery, 72; instructors, 1,131; students, 9,876; volumes in libraries 48,970; value grounds, buildings and apparatus, $1,929,170; productive funds, $199,306; total income $472,487. Eclectic schools, 6; instructors, 65; students, 833; volumes in libraries, 2,875; value in grounds buildings and apparatus, $221,000; tuition and other fees, $32,735. Homoepathic schools, 12; instructors 188; students, 1,220; volumes in libraries, 2,420; value grounds, buildings and apparatus, $185,000; receipts from fees, $33,258. Dental schools, 16; instructors, 219; students, 730; volumes in libraries, 6,335; value grounds, buildings and apparatus, $135,600; tuition and other fees, $91,240. Pharmaceutical schools, 14; instructors, 57; students, 1,347; volumes in libraries, 6,240; value grounds, buildings and apparatus, $140,800; tuition and other fees, $27,842.

NORMAL SCHOOLS.—220, with 1,466 instructors, and 43,077 pupils. These are classified as public and private schools—public, 106, private, 114. Graduates from public normal schools, 2,943; of whom 1,82 have engaged in teaching; from private normals, 752; of whom 460 have engaged in teaching. Volumes in libraries, 132,408.

COMMERCIAL AND BUSINESS COLLEGES.—162, having 619 instructors, and 27,146 students.

KINDERGARTEN SCHOOLS.—232, with 524 teachers, and 8,871 pupils.

REFORM SCHOOLS.—68; teachers, officers and assistants, male, 526; female, 528; inmates, male, 0,535 female, 2,386; volumes in libraries, 67,047; annual cost, $1,764,323; annual earnings, $729,230.

NURSE TRAINING SCHOOLS.—15; instructors, 59; 1,303 pupils since organization, and 323 in attendance, with 663 graduates, of whom 157 belonged to class of 1880.

INSTITUTIONS FOR THE DEAF AND DUMB.—56; instructors, 418; of whom 60 are semi-mutes; pupils, 6,657; volumes in libraries, 40,787; property, $6,266,066; expenditure, $1,413,691, of which $1,237,693 were State appropriations.

SCHOOLS FOR FEEBLE-MINDED YOUTH.—13; instructors and employes, 486; inmates, 2,472; income, $364,721; expenditure, $394,504.

SCHOOLS FOR THE BLIND.—30; instructors, 532; pupils, 2,032; value grounds, buildings and apparatus, $3,719,441; expenditure, $590,339; income, $707,564, of which $465,316 were State or municipal appropriations.

INDIAN SCHOOLS.

Among the tribal Indians there is yet no uniform school system; studies and methods of instruction being left with the Christian missions to which the government has largely committed the work, the teachers employed being paid by the government.

TABULATED EDUCATIONAL STATISTICS.

Indians in U. S., exclusive of Alaska	262,336	Boarding schools of Five Nations	14
Youth of school age in tribal nations	34,662	Day schools of Five Nations	199
Youth of school age in the Five Nations	9,315	Boarding schools of tribal Indians	73
Enrolled in schools of tribal nations	8,755	Day schools of tribal Indians	105
Enrolled in schools of the Five Nations	8,124	Night schools of tribal Indians	2
Average attendance in tribal nations	5,569	Whole number of boarding schools	87
Average attendance in Five Nations	7,083	Whole number of day and night schools	306
Number in tribal nations taught to read during the year	1,706	Teachers and employes among tribal Indians	570
Number who can read in Five Nations	44,132	Missionaries, not counted as teachers	210
		Whole expenditure for education of Indians	$656,417

The U. S. government has established Normal Training schools for Indians at Carlisle, Pa., Hampton, Va., and at Forest Grove, Oregon. In 1882 Carlisle numbered 284 pupils (from 33 tribes); Hampton, 101 pupils; and Forest Grove, 91 (from 10 tribes).

The Five Nations (all in Indian Territory) are the Cherokees, Chickasaws, Choctaws, Creeks and Seminoles.

The Cherokees class their public schools as primary and high, and provide for a male and a female seminary, which are the high schools, and an orphan asylum. The Board of Education makes the rules for the government and studies of these schools, each of its three members having the supervision of one of the 3 districts into which the nation is divided. School age, 7–21.

The school year has 2 terms, one of 20, the other of 16, weeks. Qualifications being equal, preference must be given to applications of native teachers for places in the primary and high schools.

Tuition is free only to children of citizens of the Cherokee Nation. Provision is also made for the establishment and support of asylums for the insane, indigent, blind and deaf and dumb.

The Choctaws have 6 national schools, of which 2 are academies and 4 seminaries for females, consisting of a specified number of youth from each district. School age, 7–18.

SCHOOLS OF EUROPE. The Paris Figaro in April, 1887 gave some interesting statistics on schools in Europe. In Russia there are 32,000 schools, having each an average of thirty-six scholars. This is one school for 2,300 inhabitants at a cost of less than a halfpenny a head of the population. In Austria, with 37,000,000 inhabitants, there are 29,000 schools and 3,000,000 scholars. The average number at each school is 104, and the cost per inhabitant 9½ d. In Italy for 28,000,000 inhabitants there are 47,000 schools, one school for every 600 people, at a cost of 8½d a head. The average number of pupils at the schools is 40. In Spain there are 3,000,000 scholars and 29,000 schools, giving an average of 56 in each school, and one school for every 600 inhabitants, as in Italy. The school bill comes to 1s 2d a head. The number of schools given for England is 58,000, which is 1 for every 600 inhabitants, with an average attendance of 52 per school, and a cost of 1s 6d per head. The Germans have a school for every 700, giving a total of 60,000 schools, with 100 pupils in each, and is 1s 7d per inhabitant. France has 71,000 schools, being one for every 500, with 66 in each school. France would, therefore, seem to have more schools than any other great European country. These schools cost the country 1s 2½d per inhabitant.

SCHOOLS. Public See *Education.*

SCIENTIFIC SCHOOLS. See *Schools.*

SEALS. The annual slaughter is: Canadian Fishery, 460,000; Norwegian, 80,000; Falkland Islands, 5,000; Montevideo, 5,000. The value is as follows: United States $2,289,813; Canada, $1,400,000; Norway, $200,000; Falkland, $15,000; Montevideo, $15,000. Alaska seal fisheries are controlled by the Alaska Commercial Company, of San Francisco; their lease expiring May 1, 1890. They are restricted from killing more than 100,000 seals annually; and these are to be males only. They have paid the U. S. Government nearly $4,000,000 since July 1, 1870. The company pays for its lease $55,000 annually, and also an internal revenue tax of $2 per each seal skin shipped, also 60½ cents for each fur seal skin taken and shipped, also 55 cents per gallon, for each gallon of oil obtained from said seals.

SEAMEN. The total employed in the merchant coasting service and navy is shown by the following table:—

	Thousands Omitted.				Ratio to Population, Per Cent.
	Navy.	Merchant.	Coast Fishing.	Total.	
Great Britain	45	193	167	405	1.11
France	43	35	94	172	0.45
Germany	8	40	27	75	0.16
Russia	26	23	74	123	0.15
Austria	10	7	9	26	0.07
Italy	15	52	74	141	0.50
Spain	7	23	44	74	0.45
Portugal	4	5	4	13	0.30
Holland	7	18	13	38	0 95
Denmark	1	7	5	13	0.70
Sweden and Norway	9	79	143	231	3 55
Greece	1	11	15	27	1 52
Turkey	4	10	3	17	0.22
Europe	180	503	672	1,355	0.42
United States	8	120	54	182	0.35
Canada	..	50	65	115	2 54
Brazil	2	6	8	16	0.18
Argentine Republic	1	2	8	11	0 55
Australia	..	11	3	14	0.48
Total	191	692	810	1,693	0.45

SEAS. See *Depth.*

SEEDS. The space and quantities of seeds required to the acre is shown in the following table:—

DESIGNATION.	SPACE AND QUANTITY OF SEEDS.
Asparagus	1 oz. Produces 1,000 plants, and requires a bed 12 feet square.
" Roots	1,000 plants a bed 4 feet wide, 225 feet long.
English Dwarf Beans	1 quart plants from 100 to 150 feet of row.
French Dwarf Beans	1 " " " 250 to 350 feet of row.
Beans, pole, large	1 " " " 100 hills.
Beans, pole, small	1 " " " 39 hills, or 250 feet of row.
Beets	10 lbs. to the acre, 1 oz. plants 150 feet of row.
Broccoli and Kale	1 oz. plants 2,500 plants, and requires 40 square ft. of ground.
Cabbage	Early sorts same as Broccoli, and requires 60 square feet.
Cauliflower	The same as cabbage.
Carrot	1 oz. to 150 of row.
Celery	1 oz. gives 7,000 plants, and requires 8 square feet of ground.
Cucumber	1 oz. for 150 hills.
Cress	1 oz. sows a bed 16 feet square.
Egg Plant	1 oz. gives 2,000 plants.
Endive	1 " " 3,000 plants, and requires 80 feet of ground.
Leek	1 " " 2,000 plants, and requires 60 feet of ground.
Lettuce	1 " " 7,000 plants, and requires seed bed of 120 feet
Melon	1 oz. for 120 hills.
Nastartium	1 oz. sows 25 feet of row.
Onion	1 " " 200 " "
Okra	1 " " 200 " "
Parsley	1 " " 200 " "
Parsnip	1 " " 250 " "
Peppers	1 oz. gives 2,500 plants.
Peas	1 quart sows 120 feet of row.
Pumpkin	1 oz. to 150 hills.
Radish	1 oz. to 100 feet.
Salsify	1 oz. to 50 feet of row.
Spinach	1 oz. to 200 feet of row.
Squash	1 oz. to 75 hills.
Tomato	1 oz. gives 2,500 plants, requiring seed bed of 80 feet.
Turnip	1 oz. to 2,000 feet.
Watermelon	1 oz. to 50 hills.

The quantities of seeds required to the acre is given in the following table:—

Designation.	Quantity of Seed.	Designation.	Quantity of Seed.
Wheat	1¼ to 2 bushels.	Broom Corn	1 to 1½ bushels.
Barley	1½ to 2½ "	Potatoes	5 to 10 "
Oats	2 to 4 "	Timothy	12 to 14 quarts.
Rye	1 to 2 "	Mustard	8 to 20 "
Buckwheat	¾ to 1½ "	Herd Grass	12 to 16 "
Millet	1 to 1½ "	Flat Turnip	2 to 3 pounds.
Corn	¼ to 1 "	Red Clover	10 to 16 "
Beans	1 to 2 "	White Clover	3 to 4 "
Peas	2½ to 3½ "	Blue Grass	10 to 15 "
Hemp	1 to 1½ "	Orchard Grass	20 to 30 "
Flax	½ to 2 "	Carrots	4 to 5 "
Rice	2 to 2½ "	Parsnips	6 to 8 "

SEEDS, OIL IN. See *Oil.*

SEMINARIES. The Theological Seminaries in the United States.—From report of the Commissioner of Education.

Denominations.	No. of Seminaries.	No. of Professors.	No. of Students.	Denominations.	No. of Seminaries.	No. of Professors.	No. of Students.
Roman Catholic	21	114	1,045	Universalist	2	12	34
Baptist	18	77	991	Non-Sectarian	2	10	74
Protestant Episcopal	18	69	300	Free Will Baptist	2	8	54
Presbyterian	16	84	643	Methodist Episcopal (South)	2	7	88
Lutheran	16	50	433	Cumberland Presbyterian	2	6	35
Methodist Episcopal	12	52	380	Unitarian	1	7	..
Congregational	11	60	353	Reformed (Dutch)	1	5	45
Christian	6	12	126	United Brethren	1	4	32
Reformed	4	14	51	New Church	1	4	6
German Meth. Episcopal	3	9	23	African Meth. Episcopal	1	..	..
United Presbyterian	3	8	69	Total	143	612	4 782

See *Schools.*

SEVEN WONDERS OF THE WORLD in ancient times, are reckoned to be 1. The light house on the Island of Pharos, near Alexandria. 2. The Statue of Jupiter in the Temple of Elis. 3. Colossus of Rhodes erected to Apollo, 4. The Temple of Diana at Ephesus. 5. The Mausoleum at Halicarnassus, erected by Artemisia. 6. The Pyramids of Egypt. 7. The Hanging Gardens of Babylon.

SEXES. The ratio to population in the principal nations is as follows:—

Countries.	Per 1,000.		Countries.	Per 1,000.	
	Male.	Female.		Male.	Female.
United States	506	494	Spain	496	504
England	485	515	Belgium	501	499
Scotland	481	519	Holland	490	510
Ireland	490	510	Denmark	491	509
France	496	504	Sweden	484	516
Germany	489	511	Norway	491	509
Russia	497	503	Canada	....	. ..
Austria	485	515	Australia	....	....
Italy	503	497			

See *Diagram page 39.*

SHEEP. The following table gives the number, and annual average slaughter each year and tons of mutton produced per 100 inhabitants:

COUNTRIES.	Thousands Omitted.			Per 100 Inhabitants.	
	Number	Annual Slaughter.	Tons of Mutton.	Sheep.	Slaughter.
River Platte	76 230	6 000	100	2 540	200
Australia	65 915	4 000	90	2 410	140
United States	49 237	14 000	340	95	27
Russia	48 830	19 600	370	60	24
Great Britain	27 896	11 200	285	79	32
Germany	25 200	10 100	195	55	22
France	23 370	9 300	165	65	26
Austria	21 418	8 600	160	58	23
Spain and Portugal	25 217	10 200	120	128	50
Italy	6 980	2 800	55	25	10
Cape Colony	11 280	2 400	40	1 050	230
Algeria	8 788	3 000	55	290	100
Norway and Sweden	4 990	2 000	43	57	23
Canada	3 330	1 300	35	75	30
Greece	2 292	900	15	138	55
Roumania	6 180	2 500	50	77	31
Belgium and Holland	1 434	600	16	16	6
Total	408 577	108 500	2 134	1:9	30

See *Meat Packing.*

SHIP BUILDING. The U. S. Census (1880 shows the following ship building statistics: Establishments, 2,188; capital, $20,979,874; vessels built, 8,026; repaired, 16,507; consuming 39,327,372, feet hard pine; 47,506,048 feet white pine; 69,701,360 feet white oak; 97,192 knees; 179,873,966 feet other lumber; 125,701,922 pounds of iron; 7,669,826 pounds yellow metal and brass; 4,684,464 yards duck; 1,996,163 lbs. manilla rope; and 1,125,131 pounds hemp cordage.

The number, class and tonnage of vessels built in the United States in 1889 is shown in the following table.

	Sailing Vessels.		Steam Barges.		Canal Boats.		Barges.		Total.	
Grand Divisions	No.	Tons.	No.	Tons.	No.	Tons.	No.	Tons.	No.	Tons.
Atlantic & Gulf C'st.	417	37,279	149	41,308	45	4,855	46	10,470	657	93,912
Pacific Coast	40	5,193	72	12,747	......	....	......	....	112	17,940
Northern Lakes	32	8,098	145	93,707	43	4,593	5	678	225	107,081
Western Rivers	......	....	74	11,565	......	....	9	646	83	12,213
Total	489	50,568	440	159,829	88	9,453	60	11,794	1077	231,146

SHIPPING. The total sea-going tonnage of the merchant shipping of the world, in 1880 was 18,131,899; carried in 6,843 steam vessels, and 3,529 sailing vessels. The comparative growth of the merchant shipping of the principal nations from 1830 to 1886 is shown in the following table:

COUNTRIES.	1830	1840	1850	1860	1870	1880	1884	1885	1891
United States	1,167,922	2,140,625	3,485,266	5,299,175	4,194,740	4,068,034	4,271,229	4,265,934	4,684,759
Great Britain	2,531,819	3,311,538	4,232 962	5 710 968	7,149,134	8,447,171	9,314,496	.	11,928 634
France	....	662,500	688 153	996,124	1,072,048	919,298	....	1,066,525	1,082,674
Norway	169,197	276,697	298,315	558,927	1,022,515	1,518,655	... .	... ...	1 665 477
Sweden	... .	...	....	.....	346,862	512,642	....	... .	473,101
Denmark	... .	....	....	.... . .	178,646	249,466	....	.. ....	473 101
German Empire	... .	......	..... .	.... ..	982 355	1,182,097	... .	....	1,678 446
Holland	... .	... .	292,576	433,922	389,614	328,281	....	....	401,273
Belgium	....	22,610	34,919	34,111	30,149	75 666	....	... ...	111 744
Italy	... .	....	....	....	1,012,164	999,196	....	... ...	828 158
Austro-Hungar'n Empire	... .	... ...	... .	. ..	329,377	290,971	.. ..	...	265 980
Greece	... .	... ...	....	263,075	404,063	... .		. ...	332 ,07

The table below shows a comparison of the sea-going shipping of the United States and Great Britain. Vessels navigating the high seas only:

	SAILING VESSELS.				STEAM VESSELS			
	UNITED STATES.		GREAT BRITAIN.		UNITED STATES.		GREAT BRITAIN.	
YEAR.	No. of Vessels.	Total Tonnage.	No. of Vessels.	Total Tonnage.	No. of Vessels.	Total Tonnage.	No. of Vessels.	Total Tonnage
1870	7,025	2 400,607	23,165	6,993,153	597	513,792	2,426	1,651,767
1873	6,786	2 132,838	20,832	5,320,089	403	483,040	3,061	2,624,431
1875	7,312	2,387,876	19 709	5,543,567	578	692,575	3,152	3,190,922
1877	6,307	2,146,731	17 765	5,526 930	542	674,036	3,133	3,283,910
1880	5,958	2,048,975	18,352	5,486,666	545	634,292	3,787	4,265,519
1881	6,045	2,055 087	18,403	5,455,851	569	666,737	4,106	4,823,043
1883	6,214	2,099,218	17,875	5,271,160	422	601,186	4 649	5,919,819
1885	6,284	2,138 884	14,909	4,714,746	355	545,187	4 852	6,464,362
1886	6,102	2,060,258	14 584	4 654,214	379	506,668	4,906	6,543,615

The decline of the American steam service and the enormous development of that of Great Britain in the sixteen years covered by the table will be noticed.

SHIPPING.—Continued.

The American and foreign shipping in United States vessels on January 1, 1892, was:

Class.	Engaged in Foreign Trade.		Engaged in Coastwise Trade.	
	Number.	Tonnage.	Number.	Tonnage.
Steamers	263	236,070,08	5,945	1,776,269,11
Sailing Vessels	1,256	749,968,15	12,407	1,339,529,69
Canal Boats	....	....	1,146	120,999,91
Barges	7	2,680,59	1,331	373,077,55
Total	1,516	988,712,82	20,829	3,609,876,26

The estimated value of the whole amount of floating property under the flag, by adopting the methods of calculation usually made use of and allowing 10 per cent. for the difference between wooden and iron vessels is about $180,000,000.

The following table shows the class, number, and tonnage of the vessels built in this country during the last four years: See diagram, page 38:

Class.	1886.		1887.		1888.		1889.	
	Number.	Tons.	Number.	Tons.	Number.	Tons.	Number.	Tons.
Sailing Vessels	405	41,236,89	447	3,463,278	423	46,281	489	50,569,77
Steam Vessels	240	44,467,82	299	100,073.87	430	107,062	440	159,318,31
Canal Boats	23	2,978,83	36	4,179,73	40	4,031	88	9,452,61
Barges	47	6,769,85	62	11,562,65	121	22,510	60	11,793,64
Total	715	95,453,39	844	150,450,03	1,014	179,884	1,077	231,134,33

SICK. The following table gives the sick population of the world:

	Sick.	Invalids.	Total.	Percentage of Population
United States	1,978	989	2,967	5.5
Great Britain	1,309	654	1,963	5.6
France	1,682	841	2,523	6.7
Germany	2,288	1,144	3,432	7.6
Austria	2,360	1,180	3,540	9.4
Italy	1,672	836	2,508	8.9
Spain	990	495	1,485	8.9
Belgium	242	121	368	6.6
Holland	190	95	285	7.1
Denmark	76	38	114	5.7
Sweden and Norway	214	107	321	4.9
Switzerland	126	63	189	6.7
Greece	62	31	93	5.8
Australia	75	37	112	4.1
Total	13,264	6,631	19,895	7.5

The ratio of sickness rises and falls regularly with death rate in all countries as shown by Dr. Farr and Mr. Edmunds at the London Congress of 1860; when the following rule was established:

Of 1,000 persons, aged 30, it is probable that 10 will die in the year, in which case there will be 20 of that age sick throughout the year, and 10 invalids.

Of 1,000 persons, aged 75, it is probable that 100 will die in the year, in which case the sick and invalids of that age will be 300 throughout the year.

For every 100 deaths let there be hospital beds for 200 sick, and infirmaries for 100 invalids.

SILK. The world's production of raw silk is 37,000,000 lbs. valued at 152 million dollars as follows: China, $72,500,000; Japan, $20,500,000: Italy, $33,000,000; India and Persia, $7,500,000; France, $6.000.000; Turkey and other countries, $12,500,000.

There are in the United States 382 establishments engaged in the manufacture of silk goods, valued at $29,983,630, as follows:

Machine Twist	$ 5,891,300	Braids and bindings	$ 828,255
Sewing Silk	778,250	Fringes, dress and cloak trimmings	3,590,860
Floss Silk	166,935	Cords, tassels, passementerie and millinery trimmings	930,450
Dress Goods	3 896,525	Upholstery and military trimmings	947,405
Satins	1,100,175	Coach laces and carriage trimmings	23,470
Tie Silks and Scarfs	547,675	Fur, hatters' and undertakers' trimmings.	62,810
Millinery silks	977,495	Embroideries	54,900
Broad goods not above enumerated	538,655	Silk value in upholstery and mixed goods.	123,750
Handkerchiefs	3,583,125		
Ribbons	5,535,205		
Laces	406,300		

SILVER. See *Coin, Mint*, also Diagram page 31.

SLAVES. In 1834 Great Britain Emancipated the following number of slaves:

Jamaica	311,700	Antigua, &c	172,093	Mauritius	68,600
Barbadoes	83,000	Guiana	84,900	Cape of Good Hope	38,400
Trinidad	22,300				
Total					780,993

In 1860 there were 3,979,700 slaves in the United States. January 1, 1863, President Lincoln's Emancipation Pproclamation went into effect. The civil war cost 655,000 men killed and over 6,000 million dollars.

Brazil in 1876 held 1,510,800 slaves by 41 000 owners, averaging 37 to each owner. Some of the wealthy Romans had as many as 10,000 slaves.

Abolition of slavery in other countries is given below:—

Serfdom in Prussia abolished by Frederick I., in 1702.

Serfdom in Denmark abolished by Christian VII., 1766.

Serfdom in Germany abolished by Joseph II., 1789.

Slave-trade abolished in Jamaica, May 1, 1807.

All slaves in Jamaica emancipated, Aug. 1, 1834.

Slavery abolished in Dutch West Indies, July 1, 1861.

Decree issued in Brazil declaring that all children born hereafter to slaves shall be free, and that all slaves shall be free 20 years later, Sept. 27 1871.

Decree issued in Brazil declaring all slaves to be free by enlisting in the army from Nov., 1871. Slavery in Brazil totally abolished May 14, 1888.

Porto Rico issued decree abolishing slavery, March 23, 1873.

Portugal issued decree suppressing slavery in the colonies of St. Thomas, etc., Feb., 1876.

Spanish Senate voted gradual emancipation, Dec. 24, 1879: same bill passed by Deputies, Jan. 21, and act promulgated, Feb. 18, 1880.

Egypt issued decree abolishing slavery, July 31, 1881.

Russian decree abolishing serfdom in the imperial domains issued by Nicholas I., in 1842.

Imperial edict providing for the entire abolition of serfdom in the whole Russian empire, proclaimed by Alexander II., March 3, 1861. The number emancipated was males, 23,466,000; females, 24,466,000. Total 47,932,000. Cost of redemption to the empire $325,000,000.

SNOW. The limit of perpetual snow and growth of trees is; on the Andes, in lat. 2 deg., the limit of perpetual snow is 14,760 ft. In Mexico, lat. 19 deg., the limit is 13,800 ft.; on the peak of Teneriffe, 11,454 ft.; on Mount Etna, 9,000 ft.; on Caucasus, 9,900 ft.; on the Pyrenees, 8,400 ft.; in Lapland, 3,100 ft.; in Iceland, 2,890 ft. The walnut ceases to grow at an elevation of 3,600 ft.; the yellow pine at 6,200 ft.; the ash at 4,800 ft.; and the fir at 6,700 ft. The loftiest inhabited spot on the globe is the Port House of Ancomarca, on the Andes, in Peru, 16,000 feet above the level of the sea. The fourteenth peak of the Himalayas, in Asia, 25,695 feet high, is the loftiest mountain in the world.

SOAP. The average annual exportation is as follows: Great Britain, million lbs. 39, value, $2,020,000; France, million lbs. 30, value, $1,550,000; United States, million lbs. 14, value, $800,000.

Average manufacture of soap in France, 255 million lbs., and the consumption almost 6 lbs. per inhabitant, as against 10 lbs. in Great Britain.

SODA. The average annual production in tons is.

Great Britain	432 000	Austria	40 000
France	127 000	Belgium, United States, etc	11 000
Germany	101 0.0		
Total			711 000

The production in Great Britian has quadrupled since 1850, when it was 104,000 tons.

SOIL. The experiments of Sebubler and Schleiden give the power of absorbing water in an area of 50 square inches, as follows, per 1000 grains of soil:

	Grains Absorbed in			
	12 Hours.	24 Hours.	48 Hours.	72 Hours.
Gypsum	1	1	1	1
Limestone	2	3	3	3
Loam clay	21	26	28	28
Muddy clay	25	30	34	35
Calcareous clay	26	31	35	35
Field clay	16	22	23	23
Slaty marl clay	24	29	32	33
Garden mould	35	45	50	52
Humus	80	97	110	120

SOUND. The cannon fired at Waterloo in 1815 was heard at Dover 180 miles distant and at the battle of Cepeda in 1859, was heard at Buenos Ayres 160 miles distant.

The following curious observations of sound have been carefully verified by an extended series of experiments: The whistle of a locomotive is heard 3,300 yards; the noise of a railroad train, 2,800; the report of a musket and the bark of a dog 1,800; an orchestra, or the roll of a drum, 1,600; the human voice reaches to a distance of 1,000; the croaking of frogs, 900; the chirping of chickens, 800. Distinct speaking is heard in the air from below up to a distance of 600 yards; from above it is only understood to a range of 100 yards downwards. It has been ascertained that an echo is well reflected from the surface of smooth water only when the voice comes from an elevation. Other similar phenomena connected with the transmission of sound have been observed, but the results disagree, either from inaccuracy in the observations, or from the varying nature of the circumstances affecting the number obtained. Such variations occur to an extent of ten to twenty per cent, and even more. The weather being cold and dry, or warm and wet, are the chief influencing causes.

SPECIE. See *Coin*, also Diagram, page 31.

SPECIE IMPORTS. See *Imports of Specie.*

SPIRITS. See *Distilled Spirits.*

SPONGES.—On the coast of Syria, 300 boats with 1500 divers pick up annually sponges worth $125,000; best, worth $10.00, inferior, $1.00. Depth, 30 to 150 feet.

STANDARD TIME. See Diagram, page 54.

STEAMBOATS. See *Shipping.*

STEAM POWER OF NATIONS. See Diagram, page 39.

STEAM VESSELS. See *Shipping.*

STEEL PRODUCTION. See Diagram, page 30.

STEEL FOR RAILWAYS. Steel rails have superseded iron, their average life being about 15 years. Steel sleepers are said to cost $500 less than creosoted timbers, but are still an experiment. The following is the use in tons per annum.

	Consumption.		
	New Lines.	Renewal.	Total.
United States	1,200,000	900,000	2,100,000
Great Britain	60,000	160,000	220,000
Continent	680,000	655,000	1,335,000
Total	1,940,000	1,715,000	3,655,000

STEEL. **Tensile Test.**—In a har 8 inches long, the tensile test is:—

Sq. Inch. Section.	Strain, Tons. per Sq. Inch.	Extension. Inches.	Sq. Inch. Section.	Strain, Tons. per Sq. Inch.	Extension. Inches.
1.0000	13 93	.01	.8325	28.35	1.40
.9799	16 96	.10	.7088	27.32	2 00
.9331	23.43	.40	,5541	25.05	2.20
.8741	27.23	1.00			

Elastic limit	17 40 tons.	Cohesion	45.21 tons.
Maximum strain	18 35 "	Extension	27½ per cent.
Breaking load	25.05 "	Contraction	44½ "

Taking the strength of Swedish iron at 100, the tensile strength of steel compares thus:

Swedish iron	100	Cannon steel	173
Boiler steel	118	Spring steel	202

A har of chrome steel, half-inch square and 5 inches long gives a strength of 141,000 pounds per square inch, being 37 per cent. more than carhon steel. The nominal strength of steel is 30 tons per square inch, hut Prof. Siemens shows that it is really 36 tons.

STORAGE OF SILVER. See *Coin*.

STONE LANGUAGE. Among the Poles a helief existed that each mouth of the year was under the influence of a precious stone. Thus:—

January, garnet, constancy and fidelity.
February, amethyst, sincerity.
March, bloodstone, courage and presence of mind.
April, diamond, innocence.
May, emerald, success in love.
June, agate, health and long life.
July, cornelian, contented mind.
August, sardonyx, conjugal felicity.
September, chrysolite, antidote against madness.
October, the opal, hope.
November, topaz, fidelity.
December, torquois.

STRAW. The world's production in million tons is, Russia, 42; United States, 20; France, 17; Germany, 16; Austria, 14; Great Britain, 10; Italy, 7; Spain, 7; Belgium, 2; Denmark, 2; Sweden, 2; Holland, 1.

STRENGTH. A comparative scale of the strength of man at 100, is:

Ordinary man	100	Farnese Hercules	262
Byron's Gladiator	173	Horse	750

For a short period, the results of experiments upon human strength are:

	Force.		Force.
With a draw knife	100 pounds.	With pincers, compression	60 pounds.
" an auger, both hands	100 "	" a hand plane	50 "
" a bench vise handle	72 "	" a hand saw	36 "
" a chisel, vertical pressure	72 "	" a thumb vise	45 "
" a screw driver, one hand	84 "	" a brace-bit, revolving	16 "
" a windlass	60 "		

Tensile and Transverse.—A crushing force of 1,000 per square inch on a bar 1 inch square and 12 inches long, gives the following ratios of strength:

	Tensile.	Transverse.		Tensile.	Transverse.
Stone	100	10	Cast Iron	158	20
Glass	123	10	Timber	1900	85

See *Steel*.

SUBMARINE BLASTING. Colonel Pasley was prohahly the first to undertake the removal of obstructions to navigation, ahout 1841, in England. Submerged rocks in East River, Hellgate, New York, were reduced by Maillefert in 1851-2, the operations heing attended with loss of several lives. Pot Rock, Frying Pan, Way's Reef, etc., were blasted, 530 charges, containing 62,282 lbs of powder being used with success; the total cost of improvements for that period was $13,000. Very extensive cuttings were made at Hallett's Point, where the surface undermined measured two and one-half acres. Again, October 10, 1885, Flood Rock was successfully hlown up at Hell Gate.

SUGAR. The world's production in thousands of tons is:

*Germany	606	*Russia	240	French Colonies	105
Cuba	520	Java	190	United States	90
*Austria	460	Manilla	180	Egypt, etc	285
*France	390	Brazil	150	All beet	1,811
British Colonies	340	*Holland, etc	115	All cane	1,860

*Beet sugar, the rest cane.

Beet sugar has increased nine-fold since 1853, and now gives 7 per cent. of saccharine instead of 4 per cent.; that is, 14 tons of roots give a ton of sugar.

The sugar product of Louisiana is shown in the following table:

Years.	Hogsheads.	Years.	Hogsheads.	Years.	Hogsheads.	Years.	Hogsheads.
1823	30,000	1840	87,000	1855	231,427	1871	128,461
1824	32,000	1841	90,000	1856	73,296	1872	108,520
1825	30,000	1842	140,000	1857	279,697	1873	89,498
1826	45,000	1843	100,000	1858	362,296	1874	116,867
1827	71,000	1844	200,000	1859	221,840	1875	144,146
1828	88,000	1845	186,000	1860	228,753	1876	169,331
1829	48,000	1846	140,000	1861	459,410	1877	127,753
1832	70,000	1847	240,000	1863	76 801	1878	213 281
1833	75,000	1848	220,000	1864	10,387	1879	169,972
1834	100,000	1849	247,923	1865	18,070	1880	218.314
1835	90,000	1850	211,201	1866	41,000	1881	122.982
1836	70,000	1851	236,547	1867	87,647	1882	241,220
1837	65,000	1852	321,934	1868	84,256	1883	221,515
1838	70,000	1853	449,324	1869	87,090	1884	130,431
1839	115,000	1854	346,635	1870	144,881	1885	231,290
1886	145,768	1887	285,153	1888	311,236	1889	296,776

SUFFRAGE. The right of suffrage in States and Territories of the United States is shown hy the following table:

State.	Residence in the State.	Residence in the County.	Residence in the Voting Precinct.	State.	Residence in the State.	Residence in the County.	Residence in the Voting Precinct.
Alabama	1 year	2 mos.	30 ds	Mississippi	6 mos.	1 mo.	....
Arizona	1 yr.	10 ds.	....	Missouri	1 yr.	1 mo.	....
Arkansas	1 yr.	6 mos.	30 ds.	Nebraska	6 mos.	60 ds.	10 ds.
California	1 yr.	90 ds.	30 ds.	Nevada	6 mos.	40 ds.	....
Colorado	6 mos.	....	....	New Hampshire	....	60 ds.	6 mos.
Connecticut	1 yr.	6 mos.	6 mos.	New Jersey	1 yr.	5 mos.	....
Dakota	90 ds.	....	....	New Mexico	6 mos.	3 mos.	30 ds.
Delaware	1 yr.	1 mo.	....	New York	1 yr.	4 mos.	30 ds.
Florida	1 yr.	6 mos.	....	North Carolina	1 yr.	90 ds.	....
Georgia	1 yr.	6 mos.	....	Ohio	1 yr.	30 ds.	20 ds.
Idaho	4 mos.	30 ds.	....	Oregon	6 mos.	90 ds.	....
Illinois	1 yr.	90 ds.	30 ds.	Pennsylvania	1 yr.	2 mos.	2 mos.
Indiana	6 mos.	60 ds.	30 ds.	Rhode Island	1 yr.	....	6 mos.
Iowa	6 mos.	60 ds.	10 ds.	South Carolina	1 yr.	60 ds.	....
Kansas	6 mos.	....	30 ds.	Texas	1 yr.	6 mos.	6 mos.
Kentucky	2 yrs.	1 yr.	60 ds.	Tennessee	1 yr.	6 mos.	....
Louisiana	1 yr.	6 mos.	30 ds.	Utah	6 mos.	....	....
Maryland	1 yr.	6 mos.	6 mos.	Vermont	1 yr.	....	3 mos.
Maine	3 mos.	....	....	Virginia	1 yr.	6 mos.	....
Massachusetts	1 yr.	6 mos.	....	West Virginia	1 yr.	60 ds.	....
Michigan	3 mos.	....	10 ds.	Wisconsin	1 yr.	....	....
Minnesota	4 mos.	....	10 ds.	Wyoming	90 ds.	....	....

NOTE.—In the abbreviations ahove, yr. stands for year, mos. for months, ds. for days.

SUICIDE. Among the circumstances keeping pace more or less with the increase of suicide (some or all of which may he part causes) are notable, the increase of railways and commerce, the greater consumption of spirits and flesh meat, the spread of secular education and infidelity, the rapid growth of urban and decline of rural life, the higher ratio of insanity, the increase of wealth, the new system of divorce, and the keener struggle for existence in Europe, owing to the greater density of population.

According to sex the percentage of suicides is:

	Male.	Female.		Male.	Female.
United States	72	28	Germany	82	18
England	73	27	Russia	79	21
Scotland	75	25	Austria	81	19
Ireland	77	23	Switzerland	88	12
France	79	21	Holland	84	16

According to Religion the percentage is:

	Per Million Persons.		
	Protestant.	Catholic.	General Ratio.
United Kingdom	63	17	56
Prussia	170	52	131
Bavaria	195	69	102
Austria-Hungary	140	90	96
Switzerland	262	81	202

TARIFF. See Duties.

TAXATION. The assessed valuation of the United States is: Real Estate, $13.036,766,925; Personal property, $3,866,226,618; Total, $16,902,993,543. Taxation: State, $52,019,955; County, $69,606,571; other civil divisions less than counties, $191,031,951; total taxation, $312,750,721.

TEA. The annual production in million lbs. is: China, 290; Japan, 35; India, 52; Paraguay, 10; Java, 7. The consumption is: Great Britain, 167; United States, 72; Russia, 37; Australia, 14; Other countries, 114.

TELEGRAPH. The United States Telegraph Companies employ over 42,000 persons with 254,110 (1890) miles of line and 807,589 miles of wire, and 16,591 offices. The aggregate mileage above given does not include railway, government private or telephonic lines; the entire lines open for public business in the world will aggregate about 625,000 miles. Russia has 78,183 miles; France, 60,796 miles; Germany, 51,164; Austria, 34,840; Australia, 57,691; Great Britain, 36,184; British India, 25,387; Turkey, 14,500; Italy, 18,135; Canada, 20,302; Mexico, 19,317; Argentine, 13,619; Spain, 11,068; Chili, 7,580; Brazil, 6,381,

The following table shows the comparative extent of the United States telegraph lines.

LINES.	Miles of Wire.	Miles of Poles and Cables.	No of Offices.	No. of Employees.
Western Union	678,997	183,917	10,382	30,000
Postal	29,500	6,200	1,598	5,300
United States Government	3,000	3,000	55	90
Deseret	1,092	968	56	57
Smaller Lines	95,000	60,000	4,500	7,000
Total	807,589	254,110	16,591	42,447

TELEGRAPHIC CABLES. There are 330 submarine cables with a length of 105,000 miles. There are 5 between Europe and North America, capable of transmitting altogether 100,000 words daily, but the traffic seldom reaches 50,000 words.

Atlantic cables show a total average cost of $2,750 per mile, but others have not exceeded $1,000. Subterranean cables have heen laid in Germany, 330 miles,

TELEGRAPHIC CABLES.—Continued.
at $2,250 per mile. Ordinary land telegraphs have cost $400 per mile. The total outlay on land and sea telegraph lines to December 1882 was about $440 million dollars.

The most extensive submarine cables are:

Date.	Between.	Miles.	Date.	Between.	Miles.
1850	Dover and Calais	25	1869	France and West Indies	2,584
1852	Holyhead and Dublin	65	1871	Singapore, China Australia	4,980
1866	Ireland and Newfoundland.	1,896	1874	Lisbon and Brazil	6,840

TELEPHONES. The American Bell Telephone Company (Boston) had in use by its licenses, January 1, 1890, about 411,500 Telephones, and 800 Telephone Exchanges in various cities of the United States. The aggregate length of telephone wires operated by these was 170,471 miles. Capital stock, $9,802,100. Number of telephones, 330,040. Gross earnings year ending January 1, 1890, $3,865,118; net earnings, $2,414,205. Dividends paid in 1889 24 per cent.

The aggregate number of telephones in use in all the cities of the country, including those of competing companies, is much greater than the above.

The extent in mileage of telegraph wires put up for telephone use in the United States is estimated at 130,000 miles.

The Bell Telephone Company of Canada has in operation over 5,000 telephones in about 100 cities or towns of the Dominion. Capital, $1,000,000.

TELESCOPES. The aperture of the larger telescopes of the world are, in inches, Lord Rosse, 72; Lassell, 48; Herschell, 48; Polkova, 30; San Jose, California, 28; Vienna, 27; Washington, 26; New Castle, 25; Pultona, 16; Cambridge, Massachusetts, 15; Paris, 13; Greenwich, 12; Cincinnati, 12; Munich, 11; Rome, 10; Berlin, 10.

Lord Rosse's telescope brings the Moon apparently within 50 miles of view

TEMPERATURE. The temperature of sea and mountains varies as follows:

SEA.

Fathoms.	Equator.	38 N.	Fathoms.	Equator.	38 N.
0	75.9	70 0	8 00	37.1	38 1
100	55.6	63.5	1,000	36.9	37 9
200	46 6	60 6	1,200	36.7	37.1
300	42 2	60 0	1,500	36.1	36 7
500	38 9	46 7	2,700	34 7	35.2

MOUNTAINS (Humboldt).

Height, Feet.	Depression of Thermometer.	Height, Feet.	Depression of Thermometer.
3,724	14.07	10,790	34.73
6,740	23.31	15,744	49.52
9,029	30.07	19,286	57.38

THEATRES. The number and ratio to population is:—

	Number.	Per Million Inhab.		Number.	Per Million Inhab.
Great Britain	152	4 4	Germany	191	8.2
France	337	8 9	Russia	44	0.6
Italy	348	12 5	Austria	152	4.2
Spain	160	9.3	United States	550	10 8

The loss of life from fire in theatre buildings.

Date.	Theatre	Victims.	Date.	Theatre.	Victims.
1772	Amsterdam	48	1857	Legborn	102
1778	Saragossa	137	1867	Philadelphia	13
1794	Capo d'Istria	945	1876	Brooklyn	283
1811	Richmond	58	1880	Nice	790
1836	St. Petersburg	770	1881	Vienna	1,460
1845	Canton	1,660	1883	Smolensk	380
1846	Quebec	355	1887	Paris, May 25	60
1847	Carlsruhe	63			

THERMOMETER.

	Reaumur.	Centigrade.	Fahrenheit.
Freezing point	0	0	32
Vine cultivation	8	10	50
Cotton cultivation	16	20	68
Temperature of Brazil	24	30	87
Hatching Eggs	32	40	104
	40	50	122
	48	60	140
	56	70	158
	64	80	178
	72	95	194
Water boils	80	100	212

TIMBER. The production and consumption of timber in the world is:

	MILLIONS OF CUBIC FEET PER ANNUM.				ANNUAL CONSUMPTION.	
	Production. All kinds.	CONSUMPTION.			Value. (Thousands omitted)	Cubic feet per inhab.
		Firewood.	Building, &c.	Total.		
United States	3,100	1,420	1,680	3,100	$387,000	58
Great Britain	140	60	395	455	101,250	12
France	1,080	850	430	1,280	107,000	33
Germany	1,450	760	690	1,450	122,500	32
Russia	6,400	2,770	3,350	6,120	281,500	76
Austria	1,980	1,120	760	1,880	150,500	51
Italy	480	230	280	510	61,500	18
Spain and Portugal	200	110	210	320	47,000	16
Belgium and Holland	70	20	90	110	23,500	12
Sweden and Norway	900	320	345	665	56,500	102
Canada	310	140	80	220	2,7000	49
Total	16,110	7,800	8,310	16,110	1,365,250	44

See *Trees.*

TIMBER CLAIMS. See *Homestead Laws.*

TIME. Time in the principal cities of the world compared at 12:00 noon at Washington, D. C.

Albany, N. Y.	12.13 p. m	Hannibal, Mo	11 07 a. m	Port Hope, Ont	11 54 a. m
Amsterdam, Holland	5 28 p. m	Hartford, Ct	12.17 p. m	Port Huron, Mich	11.34 a. m
Angra, India	3.19 p. m	Houston, Texas	10 44 a. m	Portland, Me	12.27 p. m
Atchison, Kansas	10 47 a. m	Indianapolis, Ind	11.24 a. m	Portland, Ore.	8 56 a. m
Athens, Greece	6 43 p. m	Jacksonville, Ill	11.07 a. m	Portsmouth, Va	12 08 p. m
Atlanta, Ga	11.40 a. m	Jefferson City, Mo	10 59 a. m	Providence, R. I.	12 22 p. m
Augusta, Ga	11 40 a. m	Kalama, Wash. Ter	8 58 a. m	Quebec, Que	12.23 p. m
Augusta, Maine	12 29 p. m	Kansas City, Mo	10.49 a. m	Quincy, Ill	11.07 a. m
Baltimore, Md.	12.02 p. m	Key West, Fla	11 41 a. m	Raleigh, N. C.	11 50 a. m
Bangor, Maine	12.23 p. m	Knoxville, Tenn	11.32 a. m	Richmond, Va	11 58 a. m
Bath, Maine	12.29 p. m	Laramie, Wyoming Ter.	10.12 a. m	Rio Janeiro, Brazil	2 15 p. m
Berlin, Germany	6 02 p. m	Leavenworth, Kan	10.49 a. m	Rome, Italy	5 58 p. m
Bombay, India	10.00 p. m	Lisbon, Portugal	4 31 p. m	Rome, Ga	11 32 a. m
Boston, Mass	12.24 p. m	Lincoln, Neb	10 41 a. m	St. John, N. B.	12.44 p m
Brussels, Belgium	5.25 p. m	Little Rock, Ark	10 59 a. m	St. John, N. F.	1 37 p. m
Buffalo, N. Y.	11 52 p. m	London, England	5 07 p. m	Jt. Joseph, Mo	10 50 a. m
Cape Town, Africa	6.22 p m	Louisville, Ky	11.26 a. m	St. Louis, Mo	11.07 a. m
Cairo, Egypt	7.13 p. m	Macon, Ga	11 37 a. m	St. Paul, Minn	10 56 a. m
Calcutta, India	11 01 p. m	Melbourne, Australia	2.48 a. m	Salt Lake City, U. T.	9 40 a. m
Canton, China.	12.41 a. m	Memphis, Tenn	11.08 a. m	Santa Fe, New Mexico	10 04 a. m
Cambridge, Mass	12.29 p. m	Meridian, Miss	11.14 a. m	San Francisco, Cal	8 58 a. m
Charleston, S. C.	11 48 a. m	Milwaukee, Wis	11.16 a. m	Sault St. Marie, Mich.	11 31 a. m
Charlottetown, P. E. I.	12 58 p. m	Minneapolis, Minn	10 55 a. m	Savannah, Ga	11 44 a. m
Chicago, Ill	11.17 a. m	Mobile, Ala.	11.18 a. m	Selma, Ala	11 20 a. m
Cincinnati, Ohio	11 30 a. m	Montgomery, Ala	11 23 a. m	Shreveport, La.	10 57 a. m
Cleveland, Ohio	11 41 a. m	Moncton, N. B	12 48 p. m	Sioux City, Ia	10 42 a. m
Constantinople	7.04 p. m	Montreal, Que.	12.14 p. m	Terre Haute, Ind	11 18 a. m
Columbia, S. C	11.44 a. m	Moscow, Russia	7.38 p. m	Topeka, Kan	10.45 a m
Columbus, Ohio	11.36 a. m	Nashville, Tenn	11.21 a. m	Toronto, Ont	11.51 a. m
Danville, Va	11 50 a. m	New Haven, Conn	12 16 p. m	Trenton N. J	12 09 p. m
Denver, Col	10.08 a. m	New London, Conn	12 20 p. m	Vicksburg, Miss	11 05 a. m
Des Moines, Iowa	10.53 a. m	New Orleans, La	11 08 a. m	Vienna, Austria	6 14 p. m
Detroit, Mich.	11 36 a. m	New York, N. Y.	12 12 p. m	Vincennes, Ind	11 17 a. m
Dubuque, Iowa	11.05 a. m	Omaha, Neb	10 44 a. m	Virginia City, M. T.	9 40 a. m
Dublin, Ireland	4.43 p. m	Ottawa, Ont	12.05 p. m	Wilmington, Del.	11 58 a. m
Edinburg, Scotland	4 55 p. m	Paris, France	5 17 p. m	Wilmington, N. C.	12.08 p. m
Frankfort, Ky	11.29 a. m	Paducah, Ky	11 16 a. m	Winona, Minn	11 01 a. m
Galveston, Texas	10.49 a. m	Pensacola, Fla	11.19 a. m	Wheeling, W. Va	11.45 a. m
Halifax, N. S.	12 54 p. m	Philadelphia, Pa	12 07 p. m	Yankton, D. T.	10.38 a. m
Hamilton, Ont	11.48 a. m	Pittsburgh. Pa	11 48 a. m		

TOBACCO. The total world's production of Tobacco annually is 845 thousand tons as follows: (thousand tons) United States, 287; India, 170, Russia, 75; Austria, 65; Java, 46; Japan, 40; Brazil, 38; Turkey, 35; Germany, 32; West Indies, 22; France, 15; Various Countries, 20.

The Consumption is: Great Britain, 23; France, 32; Germany, 91; Russia, 54 Austria; 85; Italy, 18; Spain and Portugal, 18; Belgium and Holland, 23; Scandinavia, 10; Turkey, 22; Switzerland, 7; United States, 85; India, 165; Japan, 38; Brazil, 20; Various Countries, 77.

The United States census of 1880 gives 7,674 establishments engaged in the manufacture of tobacco and cigars, employing over 22 millions dollars capital; 87,587 hands; paying 25 million dollars in wages and producing stock valued at $118,600,000. Tobacco is raised in forty-three States and Territories of the United States. 638,841 acres were cultivated in 1880 producing 472,661,159 pounds of tobacco. Kentucky ranks first in production, average and value of product, Virginia second. Connecticut ranks first in the value per acre, and the cost of producing every 100 lbs., Massachusetts second. North Carolina ranks first in value per 100 lbs. Connecticut second, Arkansas lowest.

The accompanying table shows the tobacco crop in the several States producing it as a staple as taken from the United States census of 1880.

Rank Production.	Rank Acreage.	Rank Total Value	STATES.	Acreage.	Production. Pounds.	Value of Crop.	Value per Acre	Value per 100 lbs	Cost of production per 100 lbs.
1	1	1	Kentucky	226,120	171,120,784	$11,089,782	$49 04	$ 6 48	$ 4 99
2	2	2	Virginia	140,791	79,988,868	5,406,744	38 40	6 75	5 23
3	7	3	Pennsylvania	27,566	36,943,272	4,612,894	167 33	12 48	8 42
4	6	5	Ohio	34,676	34,735,235	2,653,234	76 51	7 63	5 91
5	4	8	Tennessee	41,532	29 365,052	1,538,757	37 04	5 24	4 50
6	3	4	North Carolina	57,208	26,986,213	3,805,089	66 51	14 10	9 33
7	5	7	Maryland	38,174	26,082,147	1,825,750	47 82	7 00	5 91
8	11	6	Connecticut	8,666	14,044,652	1,929,982	222 70	13 74	9 85
9	8	12	Missouri	15,521	12,015,657	600,256	38 67	4 99	3 18
10	10	9	Wisconsin	8,810	10,608,423	899,118	102 05	8 47	4 95
11	9	13	Indiana	11,955	8,872,842	443,642	37 10	5 00	3 60
12	10	10	New York	4,937	6,481,431	720,868	146 01	11 12	8 00
13	15	11	Massachusetts	3,358	5,369,436	683,575	203 56	12 73	9 72
14	12	14	Illinois	5,612	3,935,825	202,745	36 12	5 15	4 17
15	14	15	West Virginia	4,071	2,296,146	170,374	41 85	7 42	6 00
16	17	16	Arkansas	2,064	970,220	41,547	20 12	4 28	2 70
			Total	631,061	469,816,203	$36,624,357			

See *Diagram page 42.*

TORPEDO SERVICE OF THE WORLD. The Secretary of the Navy has published the following table to illustrate the importance attached, elsewhere than in the United States, to the torpedo boat as a branch of naval warfare. The table gives a list of these boats possessed and in process of construction by other countries. The United States have a torpedo station at Willetts Point, Long Island, under charge of a competent officer where experiments in torpedo service is constantly practiced. The United States has no torpedo boat.

Name.	In Service 1884.	Ordered for '85.	Remarks.
England	129	55	Does not include those in colonies
Germany	11	61	Fleet to be increased to 150 of first-class.
France	82	77	Fleet to number 283 in all.
Russia	131	14	Feet to number 180 in all.
Austria	14	2	Fleet to number 70 in all
Denmark	12	..	To build 21 more.
Greece	37	..	
Italy	53	18	To build 100 more.
China	5	10	One of these is to be 164 feet long.
Japan	.	..	The largest boat under construction, 186 feet long, is now building for Japan by Yarrow & Co. Others are building in Germany.

TRADE. See *Financial History.* The *Exports* and *Imports of Nations.* Also Diagrams pages 23 and 38.

TRADES UNION. See *Labor Union.*

TRANSATLANTIC STEAMERS. See *Fast Time.*

TRANSPORTATION. See *Commerce, Shipping* and Diagram page 23.

TRAVELERS. See Passengers.

TREASURY. See *Financial* History and Diagram page 31.

TREES. The maximum age of trees is:

	Years.		Years.		Years.
Palm	250	Lemon	640	Spruce	1,300
Elm	355	Plane	720	Oak	1,000
Cyprus	388	Cedar	800	Olive	2.000
Ivy	448	Chestnut	860	Yew	2,880
Maple	516	Walnut	900	Baobab	5,100
Larch	576	Lime	1,076	Dragon	5,900

The density and cohesion of different kinds of trees is:

	Density.	Cohesion.		Density.	Cohesion.
Poplar	0.477	1.97	Sycamore	0.692	6.16
Fir	0.493	4 18	Ash	0.697	6 78
Pine	9.559	2.48	Acacia	0.717	7 93
Alder	0.601	4.54	Oak	0.808	6 49
Aspen	0 602	7.20	Birch	0 812	4 30
Maple	0.674	3.58	Beech	0.823	3.57

The comparative strength of different kinds is:

Poplar	538	Fir	585	Sycamore	744	Oak	1 000
Pine	565	Birch	672	Ash	983		

The following table gives a scale for ascertaining the age of trees.

Age, Years.	Inches Diameter.				
	Oak.	Larch.	Elm.	Spruce.	Yew.
10	5	4	1	4	1
20	10	9	5	8	2
30	14	14	10	12	3
50	23	24	23	19	4
70	32	33	36	24	6
100	41	40	50	27	9
150	54	50	61	36	14
200	64	58	71	44	20
250	74	67	83	52	25
300	84	75	94	60	30

Eucalyptus, or Australian gum-tree, sometimes grows 24 feet in 3 months; bamboo, 2 feet in 24 hours. Evergreen trees and shrubs are those which always retain their verdure: as the fir, holly and laurel; Trees valuable for their timber, are oak, chestnut, ash and elm; most valuable for general purposes, the various kinds of pine. The wellingtonia, gigantea of California are the tallest (180 feet.) Fig trees begin to bear in eighteen months after planting, and continue to increase in size and bearing capacity for more than half a century. No insect pests disturb this tree.

For the limit of the growth of trees see snow.

TUNNELS. The following table gives the names of existing tunnels and those under construction, their length, cost per yard, etc.

Date.	Name.	Length yards.	Cost per yard.	Aperture feet.
1827	Harecastle	2,926	......	14x16
1835	Kilsby	2,070	$ 770	27x24
1843	Thames	560	5,500	38x22
1870	Mont Cenis	13,540	1,005	10x 8
1879	Baltimore	10,800	......	......
1881	St. Gothard	16,390	760	9x 8
1870	Hoosac	7,000	...	24x 9
1782	Schemnitz	26,400	......	8¼x 7
1865	Aarlberg	11,300	825	......
1881	Panama	7,900	4,000	100x150
....	Comstock	6,160	800	10x14
1880	Hudson	1.833	5.500	18x18
1882	Channel	40,000	400	......
1882	Mersey	1,740	1,000	27x20
1883	Messina	14,000	900	......
1883	Hamburg	800	600	......
....	Sutro	......	......	......
1891	St. Clair, at Port Huron, Mich	3,851	649	20x20
1893	Canada and Michigan	......	......	......

There are also a large number of tunnels on the several railroads of the United States and other countries varying from a few hundred yards to several thousand. The works of the Channel and Hudson tunnels are suspended (1887) at present.

UNIVERSITIES AND COLLEGES. The total number of universities, professors, students and students per inhabitants is shown by the following:

	Universities.	Professors.	Students.	Students per Million Inhabitants.
United States	360	4,240	69,400	1,280
Great Britain	11	344	13,400	390
France	1	180	9,300	250
Germany	21	1,920	25,084	545
Russia	8	582	6,900	82
Austria	10	1,810	13,600	360
Italy	17	600	11,140	405
Spain	10	380	16,200	990
Portugal	1	40	1,300	405
Belgium	4	80	2,400	440
Holland	4	80	1,600	400
Denmark	1	40	1,400	700
Sweden	2	173	2,010	310
Norway	1	46	830	460
Switzerland	3	90	2,000	700
Greece	2	40	800	560
Canada	85	...	5,943	75
Total	541	10,645	182,307	460

See *Colleges.*

URBAN POPULATION. The United States census of 1890 gives the Urban population of 443 cities as 18,235,670 or 29.1 per cent. of the total population.

USURY. Penalties for. See *Interest Rates.*

VALUATION OF PROPERTY. See *Taxes.*

VALUE of Foreign Coins. See *Coin.*

VEGETABLES. The principal vegetable productions of the United States (1880) were: Barley, 43,997,495 bushels; Buckwheat, 11,817,327 bushels; Corn, 1,754,861,535 bushels; Oats, 407,858,999 bushels; Rye, 19,831,595 bushels; Wheat, 459,479,505 bushels; Hay, 34,205,712 tons; Hops, 26,546,378 lbs.; Sugar, 178,872 Hhds; Molasses, 16,573,273 gal.; Rice, 110,131,373 lbs.; Cotton, 5,755,359 bales; Tobacco, 472,661,157 lbs; Potatoes, Irish, 169,458,539 bushels; Potatoes, Sweet, 33,378,693 bushels.

Comparative yield of various vegetables. Production in pounds weight per acre:

	Lbs. per Acre.		Lbs. per Acre.		Lbs. per Acre.
Hops	442	Cherries	2,000	Apples	8,000
Wheat	1,260	Onions	2,800	Turnips	8,420
Barley	1,600	Hay	4,000	Cinque-foil grass	9,600
Oats	1.840	Pears	5,000	Vetches, green	9,800
Peas	1,920	Grass	7,000	Cabbages	10,900
Beans	2,000	Carrots	6,800	Parsnips	11,200
Plums	2,000	Potatoes	7,500	Mangel Wurzel	22,000

See *Agricultural Products.*

VEGETARIANS. Death rate in India is 2.05 among the vegetarian population, per 1,000 persons per annum, and only 1.89 among the non-vegetarians, a difference of 8 per cent.

VELOCITY. Sadler, in a balloon, went 74 miles an hour, and Green on one occasion, 98. The ordinary rate is 25 to 35 miles. Sounds in liquids and solids, are more efficient and more rapid than air. Two stones rubbed in water, may be heard in water at half a mile.

The following table shows the average velocity of various bodies:

	Per hour.		Per sec.
A man walks	3 miles,	or	4 feet.
A horse trots	7 "	or	10 "
A horse runs	20 "	or	29 "
Steamboat runs	18 "	or	26 "
Sailing vessel runs	10 "	or	14 "
Slow rivers flow	3 "	or	4 "
Rapid rivers flow	7 "	or	10 "
A moderate wind blows	7 "	or	10 "
A storm moves	36 "	or	52 "
A hurricane moves	80 "	or	117 "
A rifle ball "	1000 "	or	1466 "
Sound "	743 "	or	1142 "
Light "			192,000 miles per sec.
Electricity "			288,000 " "

VICE PRESIDENTS. See *Presidents* and *Cabinets.*

VINEYARDS. See *Wines.*

VITAL STATISTICS. See *Deaths* also *Diseases.*

VOLUNTEERS. See *Wars.*

VOTERS. See *Electors.*

WAGES. The Diocletian Tariff of Wages.—A. D. 303, reduced to United States money per day without food, was (in cents); to a Shepherd, 20; Ass Driver, 20; Baker, 40; Laborer, 20; Mason, 40; Carpenter, 40. Painters, 60; Smith, 40; Stone Cutter, 50. The pay to a brickmaker was 25 cents per 100, to a sheep-shearer, $1.60 per 100, to a common school master 60 cents per month, to one who taught Greek or geometry $2 per month for each pupil, and a lawyer's fee was $12.

An artisans wages in England in 1780, per week was, Blacksmith, $4.75; Mason, $4.25 Carpenter, $4.50; Cotton Spinner, $3.00. In 1880 wages had appreciated nearly double as follows: Blacksmith, $8.08; Mason, $5.70; Carpenter, $7.50; Plumber, $8.75; Cotton Spinner, $6.00

The following interesting table exhibits a comparison of weekly wages paid in Europe with those of the United States, from the report of the Secretary of State 1885.

OCCUPATIONS.	Austria.	Belgium.	France.	Germany	Great Britain.	Netherlands.	Switzerland.	UNITED STATES	
								New York.	Chicago
Bakers	$4 63	$4 28	$...	$....	$6 17	$1 80	$3 88	$ 7 00	$ 12 00
Blacksmiths	3 18	5 38	5 81	4 00	7 37	4 80	5 20	13 00	15 00
Bookbinders	4 10	5 35	5 17	4 20	6 77	4 00	4 68	14 00	16 50
Bricklayers	3 55	4 56	5 74	4 21	7 56	4 80	5 21	20 00	24 00
Cabinet-makers	4 40	5 66	6 14	4 25	7 68	4 80	5 59	12 00	15 00
Carpenters and Joiners	5 10	4 07	6 20	4 11	7 66	4 80	4 74	14 00	16 50
Coopers	3 64	5 17	5 58	3 97	7 50	4 80	4 78	12 00	12 00
Drivers, Draymen	2 90	3 77	5 57	2 96	5 37	4 40	...	10 00	12 00
Farm laborers	3 50	2 72	3 10	3 06	4 02	3 24	...	.....	.....
Laborers, Porters, etc	3 20	3 00	3 77	3 11	4 70	3 61	2 88	9 00	10 50
Plasterers	4 01	4 66	6 34	4 43	7 80	4 00	5 03	18 00	27 00
Plumbers	4 11	5 46	6 10	4 26	7 90	4 80	5 18	16 00	22 50
Painters	4 85	5 94	6 64	5 09	7 23	4 80	6 78	13 00	18 00
Tailors	4 03	5 58	5 02	3 41	7 40	5 00	6 36	7 12	6 18
Tinsmiths	3 70	4 40	5 46	3 55	6 56	4 00	4 40	11 00	12 72
Weavers	3 15	3 95	3 23	2 79	6 31	3 60	3 05	10 00	.....

WAGES.—Continued.

Average wages and cost of living in Massachusetts and Great Britain.

[From the 16th Report of the Massachusetts Bureau of Statistics and Labor, 1885.]

Industries.	Av. Weekly Wages, 1883 Mass.	Av. Weekly Wages, 1883 Great Britain	Industries.	Av. Weekly Wages, 1883. Mass.	Av. Weekly Wages, 1883. Great Britain.	Industries.	Av. Weekly Wages, 1883. Mass.	Av. Weekly Wages, 1883. Great Britain
Boots and Shoes..	$ 9 73	$ 4 90	Flax, Linen and Hemp goods....	$ 5 96	$ 3 01	Printing and Publishing.........	$11 27	$ 5 42
Building Trades..	10 91	6 61	Food preparations	10 02	4 79	Dyeing, Bleaching, etc	8 67	4 94
Carriages and wagons	11 82	6 45	Glassware	10 11	6 54	Ship building......	20 44	8 14
Clothing.........	8 58	5 46	Machinery........	10 67	6 73	Woolen goods. ..	6 90	4 86
Cotton goods	7 68	4 60	Metallic goods. ..	10 42	6 90			

Total average earnings of mechanics (family of five workers, including children) in Massachusetts per annum, $803.47; in Great Britain, $517.47.

Average total expenses of a family of mechanics in Massachusetts, 754.42; in Great Britain, $508,35.

A table of Salaries and Wages by the year, month, week or day, showing what any sum from $20 to $1,000 per annum is per month, week or working day:

Per Year.	Per Month.	Per Week.	Per Day.	Per Year.	Per Month.	Per Week.	Per Day.	Per Year.	Per Month.	Per Week.	Per Day.
$	$	$	$	$	$	$	$	$	$	$	$
20 ls	1.67	.38	.06	195 ls	16.25	3.74	.62	450	37.50	8.63	1.44
25	2 08	.48	.08	200	16.67	3.84	.64	475	39.58	9.11	1 52
30	2.50	.58	.09	205	17 08	3.93	.65	500	41.67	9.59	1 60
35	2.92	.67	.11	210	17.50	4.03	.87	525	43.75	10.07	1 68
40	3.33	.77	.13	215	17.92	4.12	.69	550	45.83	10 55	1.76
45	3.75	86	.14	220	18.33	4.22	.70	575	47 92	11.03	1.84
50	4.17	.96	.16	225	18.75	4.31	.72	600	50.00	11.51	1.92
55	4.58	1.06	.18	230	19.17	4.41	.73	625	52.08	11.99	2 00
60	5.00	1 15	.19	235	19 58	4.51	.75	650	54 17	12.47	2.08
65	5.42	1.25	.21	240	20 00	4 60	.77	675	56.25	12 95	2 16
70	5.83	1 34	.22	245	20.42	4.70	.79	700	58.33	13.42	2 24
75	6.25	1.44	.24	250	20 83	4.79	.80	725	60.42	13 90	2 32
80	6.67	1.56	.26	255	21.25	4.89	.81	750	62.50	14.38	2 39
85	7 08	1.63	.27	260	21 67	4.99	.83	775	64.58	14.86	2.48
90	7 50	1.73	.29	265	22.08	5 08	.85	800	66 67	15.34	2.50
95	7 92	1.82	.30	270	22.50	6.18	.86	825	68.75	15.82	2 64
100	8.33	1.92	.32	275	22.92	5.27	.88	850	70 83	16.30	2 72
105	8.75	2.01	.33	280	23 33	5.37	.89	875	72.92	16 78	2 80
110	9.17	2.11	.35	285	23.75	5.47	.91	900	75.00	17 26	2.88
115	9 58	2.21	.37	290	24 17	5.56	.93	925	77.08	17 74	2 96
120	10.00	2.30	.38	295	24.58	5 66	.94	950	79.17	18.22	3 04
125	10.42	2 40	.40	300	25.00	5.75	.96	975	81.25	18.70	3 12
130	10.83	2 49	.41	310	25.83	5.95	.99	1000	83 33	19.18	3 20
135	11.25	2.59	.43	320	26.67	6.14	1.02	1050	87 50	20.14	3 36
140	11.67	2.69	.45	325	27 08	6.23	1 04	1100	91.67	21.10	3 52
145	12 08	2 78	.46	330	27.50	6.33	1.06	1150	95.83	22.06	3 68
150	12 50	2.88	.48	340	28.33	6.52	1.09	1200	100 00	23.01	3.83
155	12.92	2 97	.49	350	29.17	6 71	1.12	1250	104.17	23 92	3 99
160	13 33	3.07	.51	360	30.00	6.90	1.15	1300	108 33	24 93	4.15
165	13.75	3.16	.53	370	30.83	7.10	1.18	1350	112.50	25.89	4 31
170	14 17	3 26	.54	375	31.25	7.19	1.20	1400	116 67	26.85	4.47
175	14 58	3.36	.56	380	31 67	7 29	1 22	1450	120 84	27.80	4.63
180	15.00	3.45	.57	390	32 50	7.48	1 25	1500	125 00	28.77	4 79
185	15.42	3.55	.59	400	33 33	7 67	1.28	1600	133.34	30.68	5.11
190	15.83	3.64	.61	425	35 42	8 15	1 36				

NOTE.—If the desired sum is not in the table, double some number; for instance, if the salary or wages is $2,000, double the sums opposite $1,000, and so on with the rest.

WAGES, RENT, BOARD, ETC.

The sum will be found heading the columns, and the days and weeks on the extreme left hand column. If the desired sum is not in the table, double or trebel two or three suitable numbers.

TIME.	$2.50	$2.76	$3.00	$3.25	$3.50	$3 75	$4 00	$4 25	$4.50	$4.75
Days. 1	.36	.39	.43	.46	.50	53	.57	.61	.64	.68
2	.72	.78	.86	1.03	1 00	1.07	1.14	1.21	1.28	1 36
3	1 08	1.17	1.29	1 39	1.50	1 61	1.71	1.82	1.93	2 03
4	1 44	1.56	1 71	1 86	2 00	2 14	2 28	2.43	2 57	2.71
5	1 80	1.95	2 14	2 32	2 50	2.68	2.86	3 03	3.21	3.39
6	2.15	2.34	2.57	2.78	3 00	3.21	3.43	3 64	3 86	4.07
Weeks. 1	2.50	2 75	3 00	3.25	3 50	3.75	4.00	4.25	4.50	4.75
2	5.00	5 50	6 00	6 50	7 00	7 50	8 00	8.50	9.00	9.50
3	7.50	8.25	9 00	9 75	10 50	11 25	12.00	12.75	13.50	14.25
4	10.00	11.00	12.00	13 00	14 00	15 00	18 00	17.00	18.00	19 00
5	12.50	13.75	15 00	16 25	17 50	18.75	20 00	21.25	22.50	23.75

TIME.	$5.00	$5 25	$5.50	$5.75	$6 00	$6.25	$6.50	$6.75	$7.00	$8 00
Days. 1	.71	.75	.79	82	.86	.89	.93	.96	1 00	1.14
2	1.43	1 50	1.58	1 64	1.72	1 78	1.86	1.92	2.00	2 28
3	2.14	2 25	2.37	2.46	2 58	2.67	2 79	2 88	3.00	3 52
4	2.86	3.00	3 15	3.28	3.44	3.56	3.72	3 84	4.00	4.57
5	3.57	3.75	3 94	4 10	4.30	4 45	4.65	4 80	5 00	5.72
8	4.28	4 50	4 73	4 92	5 18	5.34	5 58	6 76	6 00	6 86
Weeks. 1	5 00	5 25	5 50	5 75	6.00	6.25	6.50	6 75	7 00	8.00
2	10.00	10 50	10.00	11.50	12 00	12 50	13.00	13 50	14.00	16 00
3	15.00	15.75	16 50	17 25	18.00	18 75	19 50	20.25	21.00	24 00
4	20 00	21.00	22 00	23 00	24 00	25 00	26.00	27.00	28 00	32 00
5	25.00	26 25	27 50	28 75	30.00	31.25	32.50	33 75	35 00	40.00

WAGES AND MANUFACTURES COMPARED.

Ratio of Wages to Manufactures Produced.

STATES.	1850.	1860.	1870.	1880.	Average Per cent.
New England.........................	26	22	21	21	22
Middle..............................	24	19	18	18	19
Southern............................	21	18	18	18	18
Western	21	17	17	16	18
Total...............................	24	19	18	18	20

WARS. The cost of wars in the 19th century has been as follows:—

Date.	Belligerents.	Cost, Million Dollars.	Lose In Men.
1793-1815....	England and France..........................	6,250	1,900,000
1828....	Russia and Turkey..........................	100	120,000
1830-40....	Spain and Portugal (civil)..........................	250	160,000
1830-47....	France and Algeria..........................	190	110,000
1848....	Europe (civil)..........................	50	60,000
1848...	Mexico and United States..........................	100	
1854-56 ...	England, France, Russia (Crimea)..........................	1,525	485,000
1859....	France and Austria..........................	225	33,000
1861-65....	United States (Civil)..........................	North, 6,500 South, 2,000	280,000 520,000
1866....	Prussia and Austria..........................	100	51,000
1866....	France and Mexico..........................	75	65,000
1864-70....	Brazil and Paraguay..........................	240	....
1870-71....	France and Germany..........................	1,580	311,000
1876-77....	Russia and Turkey..........................	950	180,000
1879....	Zulu and Afghan..........................		40,000

ENGLISH WARS IN REIGN OF QUEEN VICTORIA.

1839 ...Afghan war.
1839....Aden Rebellion.
1840....Syrian war.
1841.... China war.
1841 ...Cabal insurrection.
1843....Scinde war.
1845....Sikh war.
1847....Second Sikh war.
1850....Kaffir war.
1851....Burmese war.
1854....Crimean war.
1856....China war.
1857... Persian war.
1857....Indian mutiny.
1860 ...China war.
1860....New Zealand war.
1863... Ashantee war.
1865....New Zealand war.
1867....Abyssinian war.
1873....Ashantee war.
1879....Zulu war.
1879 ...Afghan war.
1881....Transvaal war.
1882 ...Egyptian war.
1884... Soudan war.
1885 .. French and Chinese.

LENGTH AND COST OF AMERICAN WARS.

WARS.	Length.	Cost.
1. War of the Revolution..........................	7 years—1775—1782	$135,193,703
2. Indian war in Ohio territory..........................	1790	....
3. War with the Barbary States	1803—1804	....
4. Tecumseh Indian war..........................	1811	....
5. War with Great Britain..........................	3 years—1812—1815	107,159,003
6. Algerine war..........................	1815	....
7. First Seminole war..........................	1817	....
8. Black Hawk war..........................	1832	....
9. Second Seminole war..........................	1845	....
10. Mexican war..........................	2 years—1846—1848	66,000,000
11. Mormon war..........................	1856	....
12. Civil war..........................	4 years—1861—1865	6,500,000,000

See *Indian Wars.*

Number of Troops from each of the old Thirteen States, enlisted during the Revolutionary War, 1775-1783, Including Continental Soldiers and Militia.

Compiled and Condensed from the Report of the Secretary of War, May 10, 1790. American State Papers, Military Affairs, vol. 1, p. 14 to 19.

STATES.	1775	1776	1777	1778	1779	1780	1781	1782	1783
New Hampshire............	2,824	4,019	4,483	1,783	1,226	1,777	700	744	733
Massachusetts............	16,444	20,372	12,591	13,437	7,738	7,869	5,298	4,423	4,370
Connecticut............	4,507	13,127	6,563	4,010	3,544	3,687	3,921	1,732	1,7-0
Rhode Island............	1,193	1,900	2,048	8,056	1,263	915	464	481	372
New York............	2,075	8,094	5,332	2,194	3,756	4,847	1,178	1,198	1,168
New Jersey............	......	9,086	2,908	2,586	1,276	1,267	823	660	676
Pennsylvania............	400	10,395	9,464	3,684	3,478	3,337	1,346	1,265	1,598
Delaware............	......	754	1,299	349	317	556	89	164	235
Maryland............	......	8,329	7,565	3,307	2,849	2,065	2,107	1,289	974
Virginia............	3,180	6,181	11,013	7,830	8,573	6,986	6,119	2,204	629
North Carolina............	2,000	4,134	1,281	1,287	4,920	3,000	3,545	1,105	697
South Carolina............	4,000	6.069	2,000	3,650	4,500	6,000	3,000	2,000	139
Georgia............	1,000	2,301	2,173	3,873	837	750	750	750	145
Total............	37,363	89,761	68,720	51,046	44,275	43,076	29.340	18,006	13.477

LAST WAR WITH GREAT BRITAIN, 1812-1815.

The whole number of Officers and Men in the Regular Service cannot be accurately given. The following table of different periods of the War is the nearest approximation that can be made.

Date.	Officers.	Men.	Total.	Date.	Officers.	Men.	Total.
July, 1812	301	3,385	6,686	September, 1814.	2,395	35,791	38,186
February, 1813..........	1,473	17,560	19,036	February, 1815..........	2,396	31,028	33,424

The whole militia force raised during the war was 31,210 officers; 440,412 men; Total, 471,622.

Casualties reported during the war of 1812--15.

Killed........................ 1,877 | Wounded................. 3,737 | Total 5,614

NUMBER OF MEN AND CASUALTIES IN THE REGULAR AND VOLUNTEER FORCES DURING THE WAR WITH MEXICO, 1846.-48.

State.	Whole Number.	Killed.	Died of Wounds.	Wounded	State.	Whole Number.	Killed.	Died of Wounds.	Wounded
					N. Jersey Volunteers.	425	...	...	...
Regular Army including Marines..........	27,506	536	408	2,102	New York " ...	2,396	24	19	156
Alabama Volunteers....	3,026	...	...	.....	N. Carolina "	935		...	
Arkansas " ...	1,323	10	2	32	Ohio "	5,536	18	...	39
California " ...	571	...	..	.....	Pennsylvania"	2,503	21	14	132
Florida " ..	370	...	...	.....	S. Carolina "	1,0,7	80	26	216
Georgia " ...	2,132	3	...	8	Tennessee " ...	5,865	43	6	129
Illinois " ...	6,123	83	10	160	Texas "	8,018	42	4	29
Indiana " ...	4,585	47	...	92	Virginia "	1,320	...	...	4
Iowa " ...	253	...	...	.....	Wisconsin "	146	...	...	....
Kentucky " ..	4,842	73	4	105	Mormons " ...	585	...	...	....
Louisiana " ...	7,947	13	2	8					
Maryland&D.C" ...	1,355	8	3	21					
Massachusetts " ...	1,057	...	...	.....	Re-mustered Volunteers formed out of 12 mos. Vols.........	844	4	1	3
Michigan " ...	1,103	...	...	.....					
Mississippi " ...	2,423	54	4	108	Total	101,282	1,049	508	3,420
Missouri " ...	7,016	20	3	48					

WARS.—Continued.

THE FEDERAL ARMY DURING THE CIVIL WAR OF 1861–65,

The following statement shows the number of men furnished by each State:

STATES.	Men furnished under Act of April 15, 1861, for 75,000 militia for 3 months	Aggregate No. of men furnished under all calls.	STATES	Men furnished under Act of April 15, 1861, for 75,000 militia for 3 months	Aggregate No. of men furnished under all calls.
Maine	771	71,745	Kentucky	....	78,540
New Hampshire	779	34,605	Kansas	650	20,097
Vermont	782	35,246	Tennessee	.....	12,077
Massachusetts	3,736	152,048	Arkansas	.....	8,289
Rhode Island	3,147	23,711	North Carolina	....	3,156
Connecticut	2,402	57,374	California	....	15
New York	12,906	467,047	Nevada	....	216
New Jersey	3,123	79,511	Oregon	....	617
Pennsylvania	20,175	366,326	Washington Territory	....	895
Delaware	775	13,651	Nebraska	....	1,279
Maryland	.....	49,731	Colorado	....	1,762
West Virginia	900	32,003	Alabama	2,576	.....
District of Columbia	4,720	16,872	Florida	1,290	.....
Ohio	12,357	319,659	Louisiana	8,224	.....
Indiana	4,686	197,147	Mississippi	545	.....
Illinois	4,820	258,217	Texas	1,965	.....
Michigan	781	90,119	Dakota	...	181
Wisconsin	817	96,118	New Mexico	1 510	2,395
Minnesota	930	25,034			
Iowa	968	75,860	Total	107,836	2,700,316
Missouri	10,501	108,773			

The number of casualties in the volunteer and regular armies of the United States, during the war of 1861-65, was reported by the Provost-marshal General in 1866.

Killed in battle, 61,362; Died of wounds, 34,727; Died of disease, 183,287; Total died, 279,376; Total deserted, 199,105.

Number of soldiers in the Confederate service, who died of wounds or disease (partial statement,) 133,821. Deserted, (partial statement,) 104,428.

Number of United States troops captured during the war, 212,608; Confederate troops captured, 476,169.

Number of United States troops paroled on the field, 16,431; Confederate troops paroled on the field, 248,599.

Number of United States troops who died while prisoners, 29,725; Confederate troops who died while prisoners, 26,774.

STATISTICS OF THE UNITED STATES ARMY, 1789—1887.

The following table exhibits the strength of the Regular Army of the United States from 1789 to the present time as fixed by Congress. The figures are for the aggregate of officers and men:—

Year		Strength of Army.	Year.		Strength of Army.
1789.	1 Reg't Infantry, 1 Battery Artillery	840	1847.	Mexican war	17,812
1792.	Indian Border Wars	5,120	1848.	" "	30,890
1794.	Peace established	3,629	1849-1855.	Peace establishment	10,320
1801.		5,144	1856-1861.	" "	12,931
1807.		3,278	1862.	Civil War	39,273
1810.		7,154	1863-1866.	" "	43,332
1812.	War with Great Britain	11,831	1867.	Peace establishment	54,641
1815.		9,413	1868-1869.	" "	52,922
1817 1821.	Peace establishment	9,980	1870.	" "	37,313
1822-1832.	" "	6,184	1871.	" "	35,353
1833-1837.	" "	7,198	1872-1874.	" "	32,264
1838-1842.	Florida War	12,539	1875-1879.	" "	27,489
1843-1846.	Peace establishment	8,013	1891	" "	27,089

THE NATION'S DEAD.

TOTAL OF INTERMENTS IN THE NATIONAL MILITARY CEMETERIES.

Name of Cemetery.	Interments.			Name of Cemetery.	Interments		
	Known.	Unknown.	Total.		Known.	Unknown.	Total.
Annapolis, Md	2,285	204	2,489	Grafton, W. Va	634	620	1,254
Alexandria, La	534	772	1,306	Hampton, Va	4,930	494	5,424
Alexandria, Va	3,402	120	3,522	Jefferson Barracks, Mo	8,584	2,906	11,490
Andersonville, Ga	12,793	921	13,714	Jefferson City, Mo	349	412	761
Antietam, Md	2,853	1,818	4,671	Keokuk, Iowa	612	33	645
Arlington, Va	11,915	4,349	16,264	Knoxville, Tenn	2,090	1,046	3,136
Ball's Bluff, Va	1	24	25	Laurel, Md	232	6	238
Barrancas, Fla	798	657	1,455	Lebanon, Ky	591	277	868
Baton Rouge, La	2,469	495	2,964	Lexington, Ky	805	108	913
Battle Ground, D. C	43	....	43	Little Rock, Ark	3,265	2,337	5,602
Beaufort, S.C	4,748	4,493	9,241	Logan's Cross Roads, Ky	345	366	711
Beverly, N. J	145	7	152	London Park, Md	1,637	166	1,803
Brownsville, Tex	1,417	1,379	2,796	Marietta, Ga	7,188	2,963	10,151
Camp Butler, Ill	1,007	355	1.362	Memphis, Tenn	5,160	8,817	13,977
Camp Nelson, Ky	2,477	1,165	3,642	Mexico City	284	750	1,034
Cave Hill, Ky	3,344	583	3,927	Mobile, Ala	756	113	869
Chalmette, La	6.837	5.674	12,511	Mound City, Ill	2,505	2,721	5.226
Chattanooga, Tenn	7,999	4,963	12,962	Nashville, Tenn	11,825	4,701	16,526
City Point, Va	3,778	1,374	5,152	Natchez, Miss	308	2,780	3,088
Cold Harbor, Va	673	1,281	1,954	New Albany, Ind	2,139	676	2,815
Corinth, Miss	1,789	3,927	5,716	New Berne, N. C	2,177	1,077	3.254
Crown Hill, Ind	681	32	713	Philadelphia, Pa	1,881	28	1,909
Culpepper, Va	456	911	1,367	Pittsburgh Landl'g Tenn	1,229	2,361	3,590
Custer Battle Field, M. T.	262	....	262	Poplar Grove, Va	2,198	4,001	6,199
Cypress Hills, N. Y	3,710	76	3,786	Port Hudson, La	596	3,223	3,819
Danville, Ky	335	8	343	Raleigh, N. C	619	562	1,181
Danville, Va	1,172	155	1,327	Richmond, Va	842	5,700	6,542
Fayetteville, Ark	431	781	1,212	Rock Island, Ill	277	19	296
Finn's Point, N. J	....	2,644	2,644	Salisbury, N. C	94	12,032	12,126
Florence, S. C	199	2,799	2,998	San Antonio, Tex	324	167	491
Fort Donelson, Tenn	158	511	669	Seven Pines, Va	150	1,208	1,358
Fort Gibson, I. T	215	2,212	2,427	Soldier's Home, D. C	5 314	288	5,602
Fort Harrison, Va	239	575	814	Staunton, Va	233	520	753
Fort Leavenworth, Kan	835	928	1,763	Stone River, Tenn	3.821	2,324	6.145
Fort McPherson, Neb	152	291	443	Vicksburgh, Miss	3,896	12,704	16.600
Fort Smith, Ark	711	1,152	1,863	Wilmington, N. C	710	1.398	2,108
Fort Scott, Kan	390	161	551	Winchester, Va	2,094	2,365	4,459
Fredericksburg, Va	2,487	12,770	15.257	Woodlawn, Elmira, N. Y	3,074	16	3,090
Gettysburg, Pa	1,967	1,608	3,575	Yorktown, Va	748	1,434	2,182
Glendale, Va	234	961	1,195	Total	171,302	147,568	318,870

Of the whole number of interments indicated above, there are about 6,900 known, and 1,500 unknown civilians, and 6,100 known, and 3,200 unknown confederates. Of these latter, the greater portion are buried at Woodlawn Cemetery, Elmira, N. Y., and Finn's Point Cemetery, near Salem, N. J. The interments at Mexico City are mainly of those who were killed or died in that vicinity during the Mexican war, and include also such citizens of the United States as may have died in Mexico, and who, under treaty provision, have the right of burial therein. From the foregoing it will appear that after making all proper deductions for civilians and confederates, there are gathered in the various places mentioned the remains of nearly 300,000 men, who at one time wore the blue during the late war, and who yielded up their lives in defense of the government, which now so graciously cares for their asbes,

WATER.

1 cubic foot = 63½ lbs. or 6¼ gallons.
Do sea water = 64 lbs. or 6¾ gallons.
1 imperial gallon = 10 lbs. or 217 cubic inches.
224 gallons = 20 cwt. or 36 cubic feet.
A column of water, 12 inches high, 1 inch square = 434 lbs.
A similar column, 1 inch diameter = 341 lbs.
1 cylindrical foot = 4.9 gallons or 49 lbs.
An inch rainfall = 14½ million gallons per square mile.
8 cubic feet snow produces 1 cubic foot water.
Current requires minimum fall, one-tenth of an inch per mile.

WATER-POWER.

Niagara = 10 million cubic feet per minute, say 3 million horse-power nominal, or 9 million real.

Ticino (Italy), fall 530 feet, turbines 300 revolutions per minute, with static pressure 250 lbs., per square inch.

United States have 51,000 water-wheels, with 1½ million horse-power aggregate.

WATER-SUPPLY.—Lake of Moeris, made by the Pharoah of that nama was the largest reservoir in the world. It was fed by the flood water of the Nile. This reservoir was found to be 150 square miles in extent, having a bank 180 feet wide and 30 feet high. Twelve hundred square miles of country could be irrigated by it. Tlascala, an ancient city of Mexico, was fully supplied with fountains and paths. Zempoloa and Tezcuco had water in abundance, the last named being supplied after the modern style, through pipes. Water was conveyed to the city of Mexico from the spring of Amilco, near Churubusco, by means of pipes. During the first century, Rome was served at the rate of the London water supply, or sufficient for a population of 7,000,000. There were nine aqueducts; five more were added afterwards, but three of the old acqueducts suffice now. London has a supply of thirty gallons daily to each person. The supply in the large American cities, Cleveland, Baltimore, Boston, Cincinnati, Philadelphia, Chicago, Albany, Montreal and New York, range from forty to 100 gallons daily to each person. Mr. John Christopher Christensen, at Bethlehem, Pa., planned the first water works in the United States, in 1762.

WEALTH of Nations.—See *Capital*, also Diagram page 38.

WEALTH of the United States.—The total estimated true valuation of both real and personal property, hy states according to the Census of 1880 is given, in million dollars, as follows. Alabama, 378; Arizona, 23; Arkansas, 240; California, 1.430; Colorado, 149; Connecticut, 852; Dakota, 68; Delaware, 138; District ol Columbia, 223; Florida, 95; Georgia, 554; Idaho, 12; Illinois, 3,092; Indiana, 1,499; Iowa, 1,415; Kansas, 575; Kentucky, 880; Louisana, 422; Maine, 501; Maryland, 809, Massachusetts, 2,795; Michigan, 1,370; Minnesota, 638; Mississippi, 324; Missouri 1,530; Montana, 29; Nebraska, 290; Nevada. 69; New Hampshire. 328; New Jersey, 1,433; New Mexico, 30; New York, 7,619; North Carolina, 446; Ohio, 3,301; Oregon, 120; Pennsylvania, 5,393; Rhode Island, 420; South Carolina, 296; Tennessee, 666; Texas, 725; Utah, 67; Vermont, 289; Virginia, 093; Washington, 48; West Virginia, 307; Wisconsin, 969; Wyoming, 20; Total 43,642; against. 30,069, in 1870.—The assessed valuation for taxation purposes was in 1880, $10,902,993,543; in 1870, $14,178,986,732. See *Taxation.*

WEATHER. Table for foretelling the weather through the lunations of the moon: (Dr. Hershell and Adam Clarke).

If the New Moon, the First Quarter, the Full Moon or the Last Quarter, enters—	In Summer.	In Winter.
Between midnight and 2 A. M	Fair.	Hard frost unless wind is S. or E.
" 2 and 4 A. M	Cold, frequent showers	Snowy and stormy.
" 4 and 6 A. M	Rain.	Rain.
" 6 and 8 A. M	Wind and Rain.	Stormy.
" 8 and 10 A. M	Changeable.	Cold rain if wind is W., snow if E.
" 10 and 12 A. M	Frequent showers.	Cold and high wind.
At 12 M. and 2 P. M	Very rainy,	Snow and rain.
Between 2 and 4 P. M	Changeable.	Fair and mild.
" 4 and 6 P. M	Fair.	Fair.
" 6 and 8 P. M	Fair if wind N. W., rainy S. or S. E.	Fair and frosty if wind is N. or W., rain or snow if S. or S. E.
" 8 and 10 P. M	Do.	Do.
" 10 and midnight	Fair.	Fair and frosty.

OBSERVATIONS.—1. The nearer the time of the moon's change, first quarter full, and last quarter, is to *midnight*, the fairer the weather during 7 following days. Range for this is from 10 at night till 2 next morning. 2. The nearer to *mid-day* the phases of the moon happen, the more foul or wet weather during the 7 days following. 3, The moon's change entering from 4 to 10 of the afternoon, may expect fair weather.

WEIGHTS of Grain. Seeds, Etc.—Showing the weight of grain, seeds, etc,, per bushel, as established by the Legislatures of the following States. The letter *m* indicates sold by measure.

ARTICLES.	New York.	Ohio.	Pennsylvania.	Indiana.	Wisconsin.	Iowa.	Illinois.	Michigan.	Connecticut.	Massachusetts.	Rhode Island.	Kentucky.	New Jersey.	Vermont.	Missouri.	Canada.
Wheat, lbs	60	60	60	60	60	60	60	60	56	60		60	60	60	60	60
Rye	56	56	56	56	56	56	54	56	56	56		56	56	56	56	56
Corn	58	56	56	56	56	56	56	56	56	56		56	56	56	56	56
Oats	32	32	32	32	32	32	32	32	28	30		33	30	32	32	34
Barley	48	48	47	48	48	48	44	48		46		48	48	46	48	48
Buckwheat	48		48	50	42	22	40	42	45	46		52	50	46	52	48
Clover Seed	60	64		60	60	60		60				60	64		60	60
Timothy Seed	44	42		45		45		m		m		45			45	48
Flax Seed	55	56		56		56		m		m		50	55		56	56
Hemp Seed	44			44		44									44	
Blue Grass Seed	14			14		14									14	
Apples, dried	22	25			28	24		28							24	22
Peaches, dried	32	33			28	33		28							33	22
Coarse Salt	56	50	85	50		50				70		50			50	56
Fine Salt	56	50	63	50		50				70		50			62	56
Potatoes	60			60		60			60	60	60			60		
Peas	60									60					60	60
Beans	62	56		60		60				60		60			60	60
Castor Beans	46			46		46									46	
Onions	57			57		57				50	50				57	
Corn Meal				50							50				50	
Mineral Coal				60											80	

To reduce cubic feet to bushels, struck measure, divide the cubic feet by 56 and multiply by 45.

WEIGHT and Stature of Man.—The mean weight and stature of the human body at birth, and at every subsequent age.

MALES.			FEMALES.		
AGE.	Feet.	Pounds.	AGE.	Feet.	Pounds.
0	1.64	7.06	0	1.62	6.42
2	2.60	25 01	2	2 56	23 53
4	3.04	31 38	4	3 00	27.67
6	3.44	38 80	6	3.38	35 29
9	4.00	49 95	9	3.92	47 10
11	4 36	59 77	11	4.26	56.57
13	4 72	75 81	13	4 60	72 65
15	5 07	96.40	15	4.92	89 04
17	5.36	116 56	17	5 10	104 34
18	5.44	127.59	18	5.13	112.55
20	5 49	132.46	20	5.16	115.30
30	5.52	140 38	30	5.18	119.82
40	5.52	140 42	40	5 18	121.81
50	5 49	139.96	50	5.04	123.86
60	5 38	136 07	60	4 97	119.76
70	5.32	131.27	70	4 97	113 60
80	5.29	127 54	80	4.94	108.60
90	5.29	127 54	90	4.94	108 81

Mean, 103.66 lbs. Mean, 93.73 lbs.

WHEAT.—See *Agriculture, Agricultural Products*, also Diagram page 42.

WHISKY.—See *Distilled Spirits.*

WHITE and Colored Population.—See *Population.*

WIND.—The velocity and pressure per square foot is:—

Feet per Second.	Miles per Hour.	Pressure, Lbs. per Square Foot.	Feet per Second.	Miles per Hour.	Pressure, Lbs. per Square Foot.
5	3½	1 oz.	80	54	16 lbs.
10	7	4 oz.	90	61	20¼ "
20	14	1 lb.	100	68	25 "
30	20	2¼ lbs.	110	75	30¼ "
40	27	4 "	120	82	36 "
50	34	6¼ "	130	88	42¼ "
60	41	9 "	140	95	49 "
70	48	12¼ "	150	102	56 "

The average pressure in England is 257 miles daily, or 10½ per hour, say 15 feet per second, equal to 10 oz. per square foot.

Of the general and periodical currents, the trade winds are most important, and these prevail between the parallels 30 deg. N, and 30 deg, S., latitude, but attain their full breadth and force only in mid ocean, and are very materially circumscribed near the Eastern and Western continents. Trade winds blow, with occasional interruptions and modifications more or less regularly round the globe: in many places, as on the coast of Africa in summer and autumn, they are southerly, and assume the character of monsoon winds. From a very early period the monsoon winds, that appear to be a modification of the trade winds, have attracted the attention of the navigator, as, by taking advantage of their regular blowing, a quick and easy journey can be depended on. The northeast monsoon blows from November to March, the southwest monsoon from the end of April to the beginning of October.

WINE.—The consumption of Wine by countries is as follows:—

	Million Gallons.	Gallons per Inhab.		Million Gallons.	Gallons per Inhab.
Great Britain	15	0 44	Italy	480	17 40
France	780	21.00	Spain	220	13.60
Germany	120	2.70	Portugal	50	14.20
Russia	24	0 30	United States	27	0.51
Austria	300	7.90	Various	120	....

Rudesheimer is worth $100 a gallon. Prince Woronzoff sells his Tokay, 220 years old, at $45 a bottle. Champagne vintage averages 20 million bottles, of which France exports 17 millions. The Xerez vineyards, 15,000 acres, produce 4 million gallons yearly of sherry. Wine loses strength after 200 years.

The world's production is shown by the following table:

	Acres, Thousands Omitted.	Million Gallons.	Value Million $	Gallons per Acre.
France	5,150	720	225	140
Italy	4,650	580	150	125
Spain	2,720	320	95	118
Portugal	420	80	50	190
Austria	1,580	310	75	196
Germany	305	70	20	230
Russia	110	19	10	170
United States	130	21	10	.60
Algeria	51	9	5	176
South Africa	18	4		220
Australia	15	2	10	130
Argentine Republic	18	2		160
Various	60	9		150
Total	15,222	2,146	650	140

The production is declining in Europe, but increasing in Algeria, United States and Argentine Republic. Good artificial wine is made in France, 10 degrees alcohol. See *Drink of Nations.*

WOOD.—The relative value and weights of woods—showing comparative value of fire woods for fuel in a *seasoned state*, or when burnt to charcoal. Shellbark hickory being taken at 100 as the standard:—

NAME.	Value	Weight.	NAME.	Value	Weight.
Shellbark Hickory	100	4,469	Black Birch	63	3,115
Pignut Hickory	95	4,241	Black Chestnut Oak	61	3,030
Chestnut White Oak	86	3,955	Yellow Oak	60	2,919
Service-tree, or Shade bush	84	3,964	Hard Maple	60	2,878
White Oak	81	3,821	Sassafras	59	2,762
Western Hickory	81	3,705	White Elm	58	2,592
White Ash	77	3,450	Sweet Gum	57	2,834
Dogwood	75	3,648	American Holly	57	2,691
Post Oak	74	3.464	Large Magnolia	56	2,704
Swamp Whortleberry	73	3,361	Red Cedar	56	2,525
Barren Scrub Oak	73	3.339	Wild Cherry	55	2,668
Witch Hazel	72	3,505	Soft Maple	54	2,658
Pin Oak	71	3,339	Yellow Pine, soft	54	2,463
Scrub Black Oak	71	3,254	Yellow Poplar	52	2,516
Apple	70	3.115	Spanish Oak	52	2,449
Red Oak	69	3,254	Sycamore	52	2,391
Persimmon	69	3,178	American Chestnut	52	2,333
Sour-gum	67	3,142	Butternut	51	2,534
Barren Oak	66	3,102	White Birch	48	2,369
Mountain Laurel	66	2,963	Jersey Pine	48	2,137
White Beech	65	3,236	Pitch Pine	43	1,906
American Hornbeam	65	3,218	White Pine	42	1,858
Black Walnut	65	3,044			

WOOL.—The average annual clip of the world is:—

	Wool, Million Lbs.	Sheep. Millions.	Lbs. Wool per Sheep.	Value of Clip, Million $.	Value of Fleece. Cents.
United States	265	42½	6½	87	241
Great Britain	112	28	4.0	34.0	118
France	88	23	3.8	40.0	112
Germany	80	25	3 2	24.0	92
Russia	180	49	3.7	50.5	98
Austria	65	21	3.1	18.0	80
Italy	21	7	3.0	6.0	82
Spain and Portugal	82	25	3.3	24.5	82
Belgium, Holland, etc	47	15	3.1	14 0	90
River Platte	260	76	3.4	32.0	40
Canada	12	3	4.0	8 5	108
Australia	390	66	5.9	97.5	144
Cape Colony	52	11	4.7	14.0	120
India	26	8	3.3	7 5	90
Algeria	32	9	3.6	8.5	94
Total	1,657	407	4 1	432.5	100

The wool crop of the United States shows a rapid annual increase as follows, in million pounds: 1800, 8; 1830, 18; 1840, 52; 1850, 90; 1860, 112; 1870, 167; 1890, 265 Great Britain consumes 338 million pounds; France, 336; United States, 320; Germany, 190 and Russia 170. One pound of washed wool produces one yard of cloth,

WORK.—Foot-tons of energy expended in:—

Walking 1 mile	17¼	Dock laborers	325
" 4 miles	70	Pile driving	332
Carrying 60 lbs. 1 mile	25	Pavior	352
" " 4 miles	100	Turning a winch	374
Peddler's day's work	303	Man's ordinary work	300
Convict's "	310	Very hard work	460

WORKERS, Female.—In the United States in 1880 there were women workers as follows:

Artists	2,061	Journalists	288	Preachers	165
Authors	320	Lawyers	75	Printers	3,456
Barbers	2,902	Musicians	13,181	Tailors	52,098
Dressmakers	281,928	Physicians	2,433	Teachers	154,375

WRECKS.—The loss of value and life by shipwreck per annum is as follows:—

Flag.	Ships and Cargoes, Thousands Omitted.	Lives Lost.	Flag.	Ships and Cargoes, Thousands Omitted.	Lives Lost.
British	$94,500	2,090	Spanish	6,000	150
French	10,500	250	Dutch	6,000	150
German	17,000	400	United States	47,000	1,100
Russian	7,500	200	Various	31,050	700
Austrian	4,000	110			
Italian	10,250	250	Total	233,800	5,400

The total value of shipping and merchandise sent over the sea annually is almost 7,000 million dollars, and the loss is about 3¼ per cent. or less than 1 per cent. per voyage.

YARN.—The nations who import all kinds of yarn are as follows:—Germany, 70: France, 25; Russia, 32; Austria, 33; Italy, 21; Spain, 14; Holland, 20; China, 21; Other Countries, 161; total, 397 million pounds. The exporting nations in million pounds are: Great Britain, 320; Belgium, 42: France, 20; Switzerland, 15; total, 397. The value of British yarn exported in 1881 was $88,465,000.

POLITICAL HISTORY
OF THE
UNITED STATES.

INTRODUCTION.

GOVERNMENT.—In man's social and moral nature is furnished the necessity of government: As a reasonable and dependent being he is fitted for society and law. Law is a rule of action. Government is the embodiment, the defender and the enforcer of law.

RIGHTS.—A right is either a just claim or a just and lawful claim. Rights are political and civil. Political rights are those which belong to the citizen in his relation to government. Civil rights are those which are not political, and which are often termed natural or inalienable rights. They include: I. Absolute rights, and II. Relative rights. I. Absolute civil rights are those which man possesses as an individual, in his relation as a member of society to other members of society.

Two classes of these rights are often termed Personal rights, or the rights of persons. They embrace: 1. The Rights of Personal Security. The right from injury to life, body, health, reputation. II. The Rights of Personal liberty. The right to go where one chooses.

The other two classes of Absolute Rights are 1. The Right of Private Property. The right to acquire property and enjoy it, without molestation. (2.) Religious Rights. The right of men to worship God according to the dictates of their own consciences.

II. Relative Civil Rights are those which men possess in relation to particular persons or classes. These are either public or private. Public Civil Rights are those man possesses in his relations to the government (except the right to participate in it.) It includes the right of the government and its officers to our respect and obedience.

Private Civil Rights embraces those in relation of (1.) Husband and wife. (2.) Parent and child. (3.) Guardian and ward. (4.) Employer and employed.

LIBERTY is the freedom man possesses to enjoy his rights. It embraces: (a.) Natural Liberty. (b.) Political Liberty. (c.) Civil Liberty. (d.) Religious Liberty.

LAW.—The object of Law is to defend and secure man in the enjoyment of his right. It includes: 1. Political Law. (2.) Civil or Municipal Law. The Moral Law prescribes man's duties to his fellow man and to God. It is contained in the Ten Commandments, to love God with all our hearts, and our neighbor as ourselves. It is broader and more comprehensive than Political or Civil Law.

FORMS OF GOVERNMENT.—The different forms of government are:

I. Patriarchial.—In the early stages of the world.

II. Theocratical.—The direct government of the Jews by Jehovah.

III. Monarchial.—The government by a King, an Emperor or a Prince. This may be

(a.) Absolute, when all the power rests in the one governing, or

(b.) Limited, when the power of the monarch is abridged by law, legislative bodies, or other power.

A Monarchy may be either

(a.) Hereditary, as when it passes from father to son; or from a monarch to his successor, or

(b.) Elective.—When on the death of a monarch his successor is chosen by an election.

IV. Aristocratical.—When the government is administered by a few persons distinguished by birth, rank, wealth, etc.

V. Democratical or Republican.—When the government is administered by the people. This may be

(a.) Pure Democracy.—When the people meet in one body to make laws and appoint officers, or

(b.) A Republican or Representative Democracy, often called a Commonwealth; when the people through delegates or representatives [illegible] laws and choose officers.

OUR GOVERNMENT.—There have been three stages in the government of our country: the Colonial Government: the Confederation and the National Government.

The Colonial Governments were the governments of the different colonies when the inhabitants were British subjects.

There were originally *three* different *forms* of government in the colonies, viz.: The Charter, the Proprietary, and the Royal Governments. The Charter Governments were confined to New England; the middle and southern colonies were divided between the Proprietary and the Royal Governments.

The Charter Governments were composed of a Governor, Deputy-governor, and Assistants, *elected by the people;* these, with the freemen, i. e., citizens of the colony, were to compose the "General Courts," which were authorized to appoint such officers, and make such laws and ordinances for the welfare of the colony as to them might seem meet. These first forms of government in New England cantained the same principles as, and were doubtless the origin of, our Republican system.

The Proprietary Governments were those of Maryland, Pennsylvania, the Carolinas and Jersey. Part of these soon became Royal Governments. In the Proprietary governments, the power of appointing officers and making laws rested in the proprietors, by the advice and assent, generally, of the freemen. In some of them, as in the Carolinas, singular irregularities were found. In all, great confusion took place.

In the Royal Governments, which were New York, Virginia, Georgia and Delaware, the Governor and Council were appointed by the *crown;* and the people elected *representatives* to the Colonial legislature. The Governor had a negative in both houses of the legislature; and most of the officers were appointed by the king.

The colonists had no representatives in Parliament, and when an obnoxious act was passed by that body, laying duties on all tea, glass, paper, etc., imported into the colonies, the American people resisted it justly, claiming there should be no taxation without representation. Their petition for a repeal of the unjust proceeding being of no avail, they resisted the tax. Troops were sent to enforce it, resulting in the war of American Independence.

THE CONFEDERATION.—In the year 1774 the colonies united in the plan of a Congress to consult on the common good, and to resist the claims of the English Parliament. It was to be composed of delegates from the different colonies. (See Continental Congress 1775–76.)

THE NATIONAL GOVERNMENT.—The Confederation was found to be radically defective, having reference mainly to the condition of the country in the time of war instead of peace. It was inherently weak, in that it had merely a Legislative department and no Executive and Judicial Department. It could do but little more than recommend measures. It could borrow money but it had no means of raising money to pay the debts contracted. It could determine what number of troops the several States should furnish, but it could not enforce its demands. It could levy no taxes or duties, that power being reserved to the several States. Each State imposed such duties with foreign countries and with the other States, as it saw fit. Hence arose discord and jealousies.

Convention of 1786.—The Legislature of Virginia, in January, 1786, proposed a convention of commissioners to take into account the subject of trade and commercial regulations. The commissioners of five States only, New York, New Jersey, Pennsylvania, Delaware and Virginia, met pursuant to the call at Annapolis, Maryland, in September, 1786. These Commissioners recommended a general convention of all the States to meet in Philadelphia in May, 1787, to consider, not the regulations of commerce, but amendments to the articles of confederation to make the union of the States more effective.

Convention of 1787.—In accordance with this recommendation, in February, 1787, Congress passed a resolution calling for a convention. All the States, except Rhode Island, sent delegates, who met and framed the present Constitution of the United States, and recommended Congress to submit it to the several States for their adoption.

Adoption of Constitution.—As soon as nine States ratified the Constitution it was to go into effect as far as those States were concerned. In July, 1788, the ninth State, New Hampshire, sent in its ratification. North Carolina and Rhode Island did not send their ratification until one year after the government was organized.

COLONIAL HISTORY.—As early as the ninth and tenth centuries the islands of Iceland and Greenland were discovered and settled by Northmen. Lief discovered New Foundland and Nova Scotia, A. D. 1000, and Thorvald, the Northman, sailed for America two years later. The Welsh claim to have discovered America in 1170. Subsequently, Zeno, a Venetian, 1380; Columbus, an Italian, 1492; Cabot, a Venetian, in the services of England, 1497; Ponce de Leon, a Spanish soldier, 1512; and Balboa; a Spaniard, 1513, made yoyages of discovery to the New World. Repeated attempts of the Spanish and English to establish a permanent settlement in America were defeated until the beginning of the Seventeenth century, when Captain Newport, with 105 persons—with few laborers or artisans, and no families, of the London Company, arrived at Jamestown, in Virginia, and began the first permanent British and white settlement in North America. Two years previous (1605) Royal letters patent had been issued to the London and Plymouth Companies. England was at this time a hereditary Monarchy, greatly limited by law, with the King often at war for his prerogatives against the encroachments of parliament, which in turn represented only the upper classes.

1608. Captain John Smith chosen president of the colony at Jamestown.

1609. A new charter granted to the Virginia colonies—Lord Delaware made governor.

1613. New York settled by the Dutch—the island purchased from the Manhattan Indians for $24 was fortified and called New Amsterdam, now New York. Settlements immediately followed at Orange, now Albany, and in New Jersey.

1619. The first representative government in America, at Jamestown, Virginia, established "a general assembly," composed of a governor, council, and two representatives from each town, borough, or "hundred." Slavery was first introduced among the colonies by the captain of a Dutch vessel, who sold twenty negroes at Jamestown, Va.

1620. First Political union of Freemen. Arrival of the Pilgrims at Plymouth, Cape Cod, Massachusetts—in the ship May Flower, before landing they formed a political union, styled by them "The Compact of Liberty," as follows: "In the name of God, Amen, we, whose names are hereunder written, (41 male adults) the loyal subjects of our dread sovereign lord King James —, having undertaken for the glory of God, and advancement of the Christian Faith and honor of our King and country, a voyage to plant the first colony in the northern part of Virginia, do, by these presents, solemnly and mutually, in the presence of God and one another, covenant and combine ourselves together into a civil body politic for our better ordering and preservation and furtherance of the ends aforesaid, and by virtue hereof, to enact, constitute and frame such just and equal laws, ordinances, acts, constitutions and offices, from time to time, as shall be thought most meet and convenient for the general good of the colony, and to which we promise all due submission and obedience. In witness whereof we have hereunto subscribed our names at Cape Cod this eleventh day of November, ——, Anno Domini, 1620."

1621. Virginia secures the first written Constitution, and is given an elective legislature and trial by jury.

1624. Virginia's independence gives offense to the British ruler. Its government is entrusted to a governor, and twelve councilmen chosen by the King, and is made a royal province.

1627. The Plymouth Colonists purchase from the non-emigrating members the remaining interest in the colony.

1628. First Union of Plantations, by agreement of Naumkeag (Salem), Wessagusset (Weymouth), Nantasket, Piscataqua, Cocheco (Dover), and Shawmut (Boston), to defray, with Plymouth, the expense (about $60) of Miles Standish, and his band in reducing the ungodly Thomas Morton of "Merry Mount" (Mount Wollaston), now Braintree, Mass.

"The Petition of Rights," embodying the most pressing grievances, agreed to by parliament, and reluctantly accepted by the English king.

1629. Massachusetts Bay Chartered. Puritans arrive at Salem and Charlestown. Transfer of the government to the colonists, with the right to elect governor, deputy-governor and eighteen assistants, constituting the "General Court" or legislature. The establishment of "Patroons," or founders of colonies of not less than fifty persons, with the right of lordship or government under a "Charter of Liberties," granted by the Dutch West India Company in New Netherlands

1630. Grant to Plymouth Colony of a charter to William Bradford and others. Arrival of nearly 1,000 Puritans. New settlements made at Charlestown, Boston, Watertown and Dorchester. Local self-government granted each. First house erected at Boston in July. First execution for murder in Plymouth Colony. John Billington hung. Warwick secures patent to Connecticut. Robert Heath secures a grant of Carolina from the King.

1631. The second "General Court" of Massachusetts Bay limits the franchise to church members. Mason & Gorges divide Laconia, the former taking New Hampshire, and the latter all east thereof. Lords Say, Seal, Brooke and others, secure Warwick's patent to Connecticut.

1632. Magistrates of the Colony of Massachusetts first chosen by the freemen in the colony. Electing sixteen delegates to the General Court of Massachusetts Bay by eight towns of the colony. The magistrates of the Colony order that no tobacco should be used publicly. The General Court pass an act that whosoever should refuse the office of governor should pay a fine of £20, unless he was chosen two years consecutively, and £10 for refusing to be a councillor or magistrate. Maryland granted to Lord Baltimore.

1633. Virginia enacts laws for the suppression of religious secretaries. The Dutch erect a fort on the Connecticut river, in the present town of Hartford.

1634. Commissioners appointed by England to supervise Colonial affairs, with power to revoke Charters. Resistance threatened by Plymouth Colony and refusal to surrender Charter. Two delegates from each of the twelve towns obtain seats in the General court and swear Allegiance to Colonial Authorities intead of to the crown, by the "Freemans Oath". Roger Williams banished from Salem on account of his religious belief.

1635. First representative assembly in Maryland; Lord Baltimore claimed the right to initiate legislation and declared its laws void. Renewed attemps to withdraw its charter from Massachusetts Bay in the interest of the English patentees. First voting by ballot, for delegates to the general court of Massachusetts Bay. First grand jury at Boston. Political disturbances in Maryland and Virginia. First Puritan settlement in Connecticut, from Plymouth Colony.

1636. Local town goverment in Massachusetts recognized by law of general court. Puritan colony at Hartford. and first court held April 26. Charles I, sends back the governor of Virginia to rule the province, "if but for a day," in denial of the pretensions of the colonists. Roger Williams and associates found Providence R. I, under a compact: "To submit themselves in active and passive obedience to all such orders and agreements as should be made for the public good of the body in an orderly way, by major consent of the present inhabitants, masters of families, incorporated together into a township, and such others as they shall admit into the same, only in civil things." Right of taxation in Plymouth Colony denied except by consent of the freemen in public assembly. First code of laws of Plymouth Colony compiled.

1637. First Union of New England Colonies for the war against the Pequod Indians.

First Project of Political Union of New England Colonies, proposed by legislature of Plymouth to Massachusetts Bay, May 12, and by Connecticut, August 21. "The apprehensions of Connecticut dictated such extreme reserve in relation to grants of power to the proposed Confederacy, that Massachusetts did not deem it advisable to promote the scheme."

1638. "Because some preeminence was yielded to Massachusetts," Connecticut wished to reserve to each colony a negative on the acts of the Confederacy, in which case, Massachusetts contended, "all would have come to nothing." Coddington and other friends of Anne Hutchinson found the second Colony in Rhode Island, under the compact.

1639. Project of Political Union of Colonies renewed by Connecticut but rejected by Massachusetts, "not being satisfied with having an equal vote in the Confederacy with the smaller colonies." A constitution framed by Connecticut colonists, the assembly comprising an elected representative from each town, besides the governor and six magistrates elected by the whole colony. A house of burgesses provided for in Maryland, to consist of representatives elected by the people, First printing press, at Cambridge, Mass. First assembly of New Haven Colony. Settlement at Brunswick. in "the province of Maine," put itself under the government of Massachusetts Bay. The Government of Plymouth Colony changed from universal to representative democracy. Newport, R. I., colony established by dissenters from Anne Hutchinson's colony. "We, whose names are underwritten, do hereby solemnly, in the presence of Jehovah, incorporate ourselves into a body politic, and as He shall help, will submit our persons, lives and estates unto our Lord Jesus Christ, the King of kings and Lord of lords, and to all those perfect and absolute laws of His Holy Word of Truth, to be judged and guided thereby." They chose a governor, deputy-governor and five assistants. First General Election in Hartford, John Hayes, first governor. Dissenters from Massachusetts found Exeter Colony in what is now New Hampshire. Puritans from England found New Haven Colony, and formed this "Plantation Covenant:"

"That, as in matters that concern the gathering and ordering of a church, so likewise in all public offices which concern civil order, as choice of magistrates and officers, making and repealing of laws, dividing allotments of inheritance, and all things of like nature," they would "be ordered by the rules which the scripture held forth."

Massachusettts again refuses to surrender her charter on the demand of royal commissioners. A Swedish Colony settled on the Delaware.

1640. The use of tobacco prohibited by the General court of Massachusetts. Number of colonists of all ages in New England at this time was about twenty-one thousand.

1641. William Bradford surrenders The Charter of Plymouth Colony to the whole body of freeman. "The Body of Liberties" of Massachusetts Bay, a constitution or code of 100 enactments, providing among other matters, that "there shall never be any bond slavery, villeinage or captivity among us, unless it be lawful captives taken in war, such as willingly sell themselves or are sold to us;" and that "there should be no monopolies, but of such new inventions as were profitable to the country, and that for a short time only."

1642. Committe on Colonial Union appointed by General Court of Massachusetts to confer with representatives of other colonies. The King authorizes the House of Burgesses, the upper house to consist of the Governor and Council.

1643. Hence, a meeting at Boston, May 10, of delegates from Massachusetts, Plymouth, Connecticut and New Haven; "United Colonies of New England" established by them, May 19, mainly for mutual protection against their enemies. Two commissioners from each colony formed the Union which was only an advisory body; this union lasted until 1686. Rhode Island sought admission but was refused unless it would submit to Plymouth Colony.

1644. Rhode Island Colonies unite under a charter with a more democratic government. Division of the general court of Massachusetts into two chambers, insuring greater freedom to the direct representatives of the people. The New England "Blue Laws" passed 1644—46, among which are to be found these peculiar enactments. Blasphemy, idolatory, adultery and witchcraft were punished by death, and for any crime committed on Sunday the additional punishment of cutting off an ear was added. Kissing a woman on the street was punished by flogging, which penalty was actualy inflicted about a century later upon an English Sea Captain who saluted his wife on a street in Boston after a long separation. Intemperance and all immorality were punished with great rigor, and keepers of inns and public houses were required to be persons of approved character and possessed of a competency, as they were held responsible for the conduct of their guests, and the morality of their houses.

1645. First trials and executions for witchcraft in New England, four persons being put to death. Slavery discountenanced in Massachusetts by return of two kidnapped slaves. Cleyborne's rebellion causes civil war in Maryland, eventuating some years later in extension of popular privileges. Progress in New Netherlands promoted by treaty with Indians.

1646. Colonial freedom vindicated by Governor Winslow, of Plymouth Colony, from disloyalty to England. The Assembly of Maryland pass laws tolerating liberty of conscience in religious belief. The friends or Quakers first came to Massachusetts, against whom laws were passed.

1647. Legislature of Massachusetts passed an act against the Jesuits. First general Assembly in Rhode Island. Complete freedom of religion established. All men may walk as their consciences persuade them, without molestation every one in the name of his God.

1648. Laws of Massachusetts first printed. Free schools established by law.

Margaret Jones of Charlestown, Mass., executed for witchcraft.

The "Cambridge Platform" and the "Westminster Confession of faith" adopted by a majority of the New England churches. Intolerance in Virginia. The Governor orders the Congregational Church and its pastor to leave the colony. Population of the Colony 15,000 whites and 300 negroes. Act of toleration in Maryland, granting freedom of worship to all *Christian* sects. Cromwell and the Commonwealth accepted by New England; Virginia refuses to accept and remains loyal to royalty, proclaims Charles II. king, whence its name of "Old Dominion."

1649. Wearing long hair declared unscriptural by declaration of the Government of Massachusetts.

1650. Constitution of Maryland adopted and toleration to political principles extended The General, Assembly divided into two chambers; no taxation without consent of lower house; established Settlement of boundry dispute between New Haven and New Netherlands by a Joint Commission. English Colony established on Chowan River, North Carolina.

1651. Law was passed by the Legislature of Massachusetts against extravagance in dress. Stone, the lieutenant of Lord Baltimore, proprietor of Maryland, removed from office. The English Parliament attempts to subject the colonies of Virginia. They dispatch an armament under Sir George Ayscue. Governor Berkeley hires some Dutch ships, and, aided by the colonists, resists them, and compels the English Government to grant the colonies the same privileges enjoyed by the free people of England, and a right to free trade with all nations.

Attempted Subversion of the charter of Rhode Island, with a view to its absorption by the larger colonies. Colonial commerce forbidden to foreign vessels by English Navigation Act—first appearance of the prohibitive system in commerce.

1652. The Province of Maine taken under the protection of Massachusetts.

Submission of Virginia to the Commonwealth, taxation only with consent of the assembly and other principles of political liberty being guaranteed. Proprietary government in Maryland temporarily abolished by the Commonwealth. Slave trade, and slavery of more than ten years abolished in Rhode Island; they had never existed in Providence Plantation; both authorized in New Netherlands. Popular freedom in New Netherlands in conflict with Governor Stuyvesant. Demand for elective municipal government for New Amsterdam granted by the States General after having been refused by the governor, who strongly disapproved of such "imprudent entrusting of power with the people."

1653. First municipal election in New Amsterdam. First popular representation in New Netherlands; a republican delegate convention of nineteen members, representing eight districts, submitted a statement of grievances to Governor Stuyvesant, who ordered them to disperse "under pain of his high displeasure," saying, "We derive our authority from God and the Company, not from a few ignorant subjects; and we alone can call the inhabitants together." The appeal of the convention taken to Holland by their advocate. Proprietary authority re-established in Maryland. The governor's assumption of the illegality of previous administration followed hy his deposition, and the re-establishment of the government by commissioners.

1654. The Dutch drive the Swedes from the Delaware.

Col. Wood, of Virginia, sent a company of men to explore the country of Ohio.

Disfranchisement of Roman Catholics in Maryland by the Protestant majority in the assembly; violent antagonism of Catholic and Protestant parties resulted in temporary anarchy; the commissioners ordered by Cromwell, "not to busy themselves about religion, but to settle the civil government."

1656-7. Quakers arrive in Massachusetts; they are arrested and imprisoned under the general law against heretics, and reshipped to England.

1657. The proprietor of Maryland makes concessions to popular liberty, and secures the re-establishment of his authority in the Colony.

1660. English Navigation Act renewed, greatly retarding Colonial commerce. The restoration of royalty in England generally accepted by the Colonies. Lord Berkeley restored as governor of Virginia. Supreme authority of the people declared in Maryland. Quakers prohibited from emigrating to Virginia under severe penalties.

1661. Incorporation by Charles II. of a Society for propagating the gospel among the Indians of New England.

Religious intolerance in Virginia resulting from re-establishment of Church of England. Royal order for arrest of fugitive regicides in New England failed of execution, through lack of zeal of the colonial authorities. Last Quaker execution in New England, at Boston. No taxation in Massachusetts without consent of General Court.

1662. King Charles II. grants Charter of Connecticut, including the Colony of New Haven. Two licensers of the press appointed by the legislature of Massachusetts. Extension of Franchise to members of the Church of England in Massachusetts demanded by the King.

1663. Lord Clarendon and others receive royal patent to Carolina, with freedom of conscience to colonists and the right to elect the governor and legislators. Connecticut limits the franchise to a property qualification of £20, besides personal property. New Charter granted Rhode Island. Popular Assembly in New Amsterdam.

1664. The Duke of York secures a grant of New Netherlands from his brother, King Charles, and name changed to New York.

Capture of New York and Albany from the Dutch. The Duke of York grants New Jersey to Lord Berkeley and Sir George Carteret. Elizabethtown made the capital.

A royal charter granted the Colony at Albermarle, and Lord Drummoud appointed governor, with a council.

Failure of royal commissioners to enforce a larger measure of royal authority in Massachusetts. No taxation without consent of legislature affirmed by Rhode Island.

1665. Free schools provided in every town in Massachusetts. Representative Government established in New Jersey, with an elective assembly, liberty of conscience, and no taxation without consent of the assembly. Union of New Haven and Connecticut colonies. The Government of Rhode Island outlaws quakers for refusing to bear arms.

1666. Virginia convenes an Assembly. Slavery introduced into Carolina from Barbadoes. Maryland Assembly pass an act for the naturalization of aliens. Act of 1649 confirmed establishing absolute political equality among all Christian denominations.

1667. Conquest of New Netherlands sanctioned by Treaty of Breda. Tyrannical exactions in New York, by the Duke of York's governors: "If there is any more murmuring against the taxes," said the governor, "make them so heavy that the people can do nothing but think how to pay them." The promise of a representative assembly evaded, and the settlers required to purchase new deeds to their lands.

1668. General Assembly of New Jersey meets at Elizabethtown.

1670. The Duke of Albemarle attends a colony of loyalists and noblemen to establish an aristocracy and town at Port Royal, calling it Charleston, in honor of the King. Governor Berkeley, of Virginia, makes the absence of free schools and printing a subject of thanksgiving.

1670-72. Great discontent among the colonists of New Jersey, and resistance to quit-claim of proprietary governor. The Assembly deposes the governor, who is replaced by another son of the proprietor. England creates the first impost on inter-colonial commerce, "based upon the principle that the colonies were established at the cost, and for the benefit of the mother country."

1672. Laws of Connecticut printed and every family ordered to have a law book.

1673. New England contained 120,000 inhabitants; Boston had 15,000, and beggary was unknown in the Colonies. Proprietary Government in Virginia, by royal grant to Earl of Arlington and Lord Culpepper, for 31 years. New York retaken by the Dutch, July 30.

1674. First Legislative Assembly meets in South Carolina. New York restored to England by Treaty of Westminster, February 19, and surrendered to English governor, October 31.

1675. King Philips war in New England. Attack on Swanzey. Indians sold by New England to the West Indies. Connecticut resists the assumption of dominion by the governor, appointed by the Duke of York, whose new patent covered from the Connecticut river to the Delaware.

1676. Berkeley attempts to suppress Bacon's Rebellion in Virginia, and a civil war is declared. Success of the popular party under Bacon's leadership. First election by universal suffrage, of assembly of Virginia, and no taxation without consent of assembly affirmed. Arbitrary government in Virginia in conflict with the "rebels," who burn Jamestown, and pillage

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the houses of the loyalists. Death of Bacon, subjugation of his followers, and hanging of the leaders.

Massachusetts again disappointes the royal expectation of submission. The spirit of popular liberty in Carolina strengthened by arrival of refugees from Virginia—Bacon's patriots. New Jersey divided into East and West Jersey.

1677. Insurrection in Carolina. Massachusetts purchases the territory of Maine from Ferdinando Gorges, the grandson of the original proprietor.

1678. The royal Governor in conflict with the Assembly. Universal Suffrage in Maryland, in electing the general assembly.

1679. First royal province in New England; Maine and New Hampshire separated, and the rights of the deceased proprietor of the latter awarded to his son, Robert Mason, whose nominee for governor was commissioned by the king, but denied recognition by "the unreasonable people of New Hampshire." First collector of customs and surveyor-general of New England at Boston, thwarted by the people and refused redress by the colonial courts.

1680. The First Assembly of New Hampshire meets at Portsmouth.

Arbitrary Government in Virginia continued by the proprietor-governor Culpepper. Indian captives sold into slavery from Carolina. Duties on imports without its consent declared "illegal and unconstitutional" by assembly of New Jersey.

1681. Pennsylvania granted to William Penn, who colonized it. Penn's aim was "to establish a free commonwealth without respect to the color, race or religion of its inhabitants," and especially as a refuge for the members of his own faith, the Quakers. First legislative assembly of Quakers convene. First Legislature of New Jersey assembles.

1682. October 24, William Penn arrives in America; formation of Treaty of Shakamaxon with the Indians, who are paid for their lands. Philadelphia founded. Calling of a general assembly and passage of a code of laws. The governor of Carolina holds a parliament at Charleston, to pass laws for the better protection of the colonies. The Quakers purchase East Jersey.

1683. Second Pennsylvania Assembly held and a new Constitution adopted, and new laws passed. First school opened in Philadelphia. First Legislative Assembly held in New York; supreme legislative power declared to be in the governor, the council and the people; no taxation without consent of assembly; trial by jury; soldiers should not be quartered on the people; martial law should not be proclaimed; no person who accepted the general doctrines of religion should be persecuted.

1684. Carolina encourages traffic in Indians; many sold in the West Indies. The English courts declare the Charter of Massachusetts forfeited. By the revocation of grant to Culpepper and Arlington, 1673, Virginia again becomes a royal province. Treaty of Albany, between governors of New York and Virginia and the chiefs of the Iroquois, promoted peace and prosperity in the colonies.

1685. The English king declares the charter of Massachusetts void, and appoints Joseph Dudley president of all New England. The king cancels the charter of Rhode Island, and extends the royal government of New England to that dependency. The surrender of the charter of Connecticut demanded by Arnold. The Assembly then in session at Hartford artfully conceal the charter, and refuse to give it up.

1686. Massachusetts deprived of her charter. First printing press in Pennsylvania established by Bradford. Huguenot exiles arrival in the colonies. Liberty-loving victims of Jeffrey's bloody assizes transported to Virginia. Despotism in New England under Governor-General Andros, 1687 to 1689.

1687. A second attempt to deprive Connecticut of her charter fails, it being hidden from Andros in her old oak.

1688. New York and New Jersey colonies united to New England. The Quakers of Pennsylvania make the first protest against negro slavery. Overthrow of despotism in Carolina. Trial and punishment of Governor Sothel by the assembly; peace, progress and freedom under his successors. Despotism in Virginia resisted by an assembly "more turbulent than any which had preceded;'" armed insurrection prevented by the Revolution in England. Execution of a woman in Boston for witchcraft.

1689. Sir Edmund Andros seized and imprisoned in Boston and sent home to England. The people rise in mass and resort to arms, and overthrow despotism from Maine to Pennsylvania. Commencement of King William's war between England and France and their American colonies; development of these retarded by war, which, however, promoted future liberty and union by the severe discipline of a common danger and the necessity of concerting broader measures of attack and defense, as well as statesmanship. The provisional government of Massachusetts recognized by William and Mary. The Catholic party lose control of the government of Maryland.

1690. First bills of credit issued among the colonists by the government of Massachusetts. First General Colonial Congress, at New York, May 1, by suggestion of General Court of Massachusetts, to consult for the safety of the whole land—Massachusetts, Plymouth, Connecticut and New York, represented. It concerted measures for the invasion of Canada.

1691. New England at this time contained 150,000 inhabitants. Leisler and Milbourne, of New York, tried and executed for treason. Maryland made a royal province, and Catholics disfranchised. Delaware separated from Pennsylvania. Charter of William and Mary College by the Crown.

1692. Massachusetts bay and Plymouth colonies united under a new charter. Sir William Phipps appointed governor. New charter being slightly reactionary in asserting petty royal prerogatives, gave rise to party distinctions of "Liberty Men" and "Prerogative Men." Religious freedom denied and progress retarded in Massachusetts by executions for witchcraft; the delusion at its height, 19 persons being convicted and executed for the crime. Pennsylvania taken from Penn and annexed to New York.

1693. Bradford establishes first printing press in New York. Delaware annexed to New York.

1694. Penn's rights in Delaware and Pennsylvania restored. Maryland establishes county schools.

1695. The wise administration of Archdale in Carolina establishes peace in the Colonies, and civil and religious liberty promoted. Massachusetts establishes a Puritan Colony in Carolina.

1696. William Penns Plan of a Colonial Union was "That the severel colonies meet once a year, and oftener if need be during war, and once in two years in peace, by stated deputies to debate and resolve of such measures as are most advisable for their better understanding and the public tranquility and safety.'

New York invaded by the French from Canada. Colonial affairs entrusted to English Board of Trade and Plantations, more especially as to enforcement of navigation acts, which proved an instrument of oppression and a seed of discontent and revolution. Indians attack Haverhill, Mass.

1697. The Peace of Ryswick ends King Williams war.

1698. A French Colony arrives at the mouth of the Mississippi. The Earl of Belmont appointed Governor of New York and its prosperity promoted by his liberal Government.

1699. Assembly of Maryland removes to Annapolis. The French settle Louisiana.

EIGHTEENTH CENTURY.

1700. United action of the Colonies against the future attacks of French and Indians, provided for by appointment of quotas of troops, but the actual levy was not found necessary.

Legislature of New York passes a law to hang every Popish priest who should come into the province, they being alleged as "incendiaries."

1701. New frame of government given to Pennsylvania. Property qualifications for suffrage, 50 acres of real, or £250 of personal property required. Commencement of Queen Anne's war. Slavery discountenanced in Boston by instructions to representatives in the general court to labor "to put a period to negroes being slaves."

1702. The Jerseys united in a royal province. Delaware permanently separated from Pennsylvania. Progress of New York hinderd by a selfish and profligate governor. Free grammar school established in New York.

1703. A duty of £4 sterling laid on imported Negroes in Massachusetts. Growth of liberty in American Colonies as reported to English government: "Commonwealth notions improve daily, and if not checked in time, the rights and privileges of British subjects will be thought too narrow-"

1704. Tonnage duty laid on forign vessels by Rhode Island. Maryland passes an act to prevent the growth of Popery. Protestants in the state persecute the Catholics. First permanent Newspaper published (*News Letter*) in Boston.

1706. Bills of Credit issued by Carolina and restoration of franchise to dissenters.

1707. New Jersey remonstrates against the arbitrary acts of her governor, asserting the principle that "liberty is too valuable a thing to be easily parted with." Growing importance of American colonial trade felt in England.

1709. First paper money currency issued in New York, New Jersey and Connecticut.

1710. Several thousand Germans immigrate, settling in New York, Pennsylvania and Connecticut. First Colonial Post Office at New York.

1712. Military union of the Carolinas and Virginia against Tuscarora Indians. Abolition of slavery in Pennsylvania declared by its assembly to be "neither just nor convenient." Free schools founded in Charlestown, Mass.

1713. Slaves transported to South Carolina by British ships in great numbers, to cultivate rice. Continued dissatisfaction of the colonies with the governors and other royal officials. All of Maine annexed to the government of Massachusetts.

1717. Increase of New England commerce shown by the clearing from the port of Boston alone, of 1,247 vessels in three years.

1718. Impost duties laid by Massachusetts on English manufactures and English ships. Freedom of the press curtailed by official censorship in New England.

1719. Colonial manufactures discouraged by parliament, as tending to lessen dependence on Great Britain.

1722. Paper money first used in Pennsylvania. Discontent of New England at the continued enforcement of the royal prerogative of selecting the best forest trees.

1727. The Carolinas vigorously condemn excessive importation of slaves.

1729. Proprietary Government of Carolina sold to the crown, and two royal governments, North and South Carolina, established. First large Irish immigration, settling chiefly in Maryland and Virginia.

1731. England alarmed by the large increase in colonial manufactures, as they "would interfere with the profit made by the British merchants."

1732. Tobacco and corn made legal tender in Maryland. South Carolina Gazette and Rhode Island Gazette established. Royal charter granted Oglethorpe for colonizing Georgia with released poor debtors. Export of colonial manufactures forbidden by the "hat act." "I will leave the taxation of America," said Walpole, "to some of my successors who have more courage than I have."

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1733. First Grand Lodge of Free Masons in America constituted in New England. All sugar imported into the colonies taxed under the "importation act." England colonizes paupers in Georgia: 35 families settled at Savannah; slavery and rum excluded; Jewish colonists received despite the remonstrance of the Georgia trustees in England. Massachusetts' remonstrance against official encroachments rebuked by the home government, "as a high insult tending to shake off the dependence of the colony upon the kingdom." Georgia and Pennsylvania make treaties with the Indians.

1734. Freedom of Colonial Press vindicated by the acquittal of the publisher of the New York *Weekly Journal*, which had opposed the claim of the governor for unearned "back pay."

1738. Unsuccessful Slave insurrection in South Carolina.

1739. The governor of Pennsylvania proposes a Stamp Act. Admiral Vernon attacks the Spaniards in Florida.

1740. Oglethorpe with 2,000 men makes an unsuccessful attack on St. Augustine. South Carolina Assembly defines the first law on slavery.

1741. New Hampshire separated from Massachusetts. The "General Magazine and Historical Chronicle," published by Franklin. Great panic in New York, from an apprehension of a negro insurrection, which subsided only after burning and hanging some of the alleged conspirators. Behring, a Russian explorer, discovers Alaska. First cast iron stove invented by Franklin, who refuses to accept letters patent on the ground that "as we were benefited by the inventions of others we should be willing to devote our own to the general welfare."

1744. King George's War begun, the American section of the War of the Austrian Succession. Treaty of Lancaster, Pa., to forestall French intrigues with Indians of the English colonies.

1745. The capture of Louisburg, "the Gibraltar of America," by Col. Pepperel, "filled Europe with amazement and America with joy" at the prowess of the colonial troops, and exerted no little influence on the progress of the colonies toward independence.

1746. France and England determined to wage a war of extermination upon each other in their American Colonies. French expedition under D'Auville, which threatened New England, failed by means of storms, sickness in the fleet, etc.

1747. Saratoga captured and the inhabitants massacred by French and Indians. Surrender of impressed seamen at Boston to the demand of the citizens.

1748. New England troops surrender Louisburg. New England issues bills of credit.

Opposition of New York Assembly to the demands of royal officials. Arbitrary colonial government promoted, and the English constitution menaced by the doctrine of the divine right of kings and the duty of non-resistance. King George's War closed by Treaty of Aix-la-Chapelle. First export of cotton, a small lot from Charleston. Manufacture of fire-arms in Massachusetts.

1749. A royal official of Boston suggests a Stamp Act. The Ohio Company chartered. Peace of Georgia menaced by the intrigues with the half breed "queen of the Creeks."

1750. Massachusetts passes a law against theatrical entertainments. Divine right of kings and non-resistance vigorously denounced from a Boston pulpit —an "impious bargain," said Mayhew, "between the sceptre and the surplice;" "fabulous and chimerical" doctrine; if rulers oppress, resistance is "lawful and glorious." Colonial manufactures of iron declared "a common nuisance" by parliament, and prohibited under a penalty of £200.

1751. Archibald Kennedy, British receiver-general at New York, urged "an annual meeting of commissioners from all the colonies at New York or Albany," by authority of parliament. "From upwards of forty years' observation upon the conduct of provincial assemblies, and the little regard paid by them to instructions," he concluded that, "a British parliament must oblige them to contribute, or the whole would end in altercation and words."

1752. Franklin's Plan of Union, first sketched anonymously in his newspaper, suggested that "a voluntary union, entered into by the colonies themselves, would be preferable to one imposed by parliament; for it would be, perhaps, not much more difficult to procure, and more easy to alter and improve, as circumstances should require and experience direct."

British Colonial Affairs transferred in England to the Board of Trade and Plantations. Georgia becomes a royal province. Washington sent by the Governor of Virginia to the French commander on the banks of the Ohio, to confer in regard to a settlement of rights of territory.

1753. In England, many proposals were "made for levying taxes on America." The Board of Trade was urgent "for a revenue with which to fix settled salaries on the northern governors, and defray the cost of Indian alliances."

1754. Convention of Seven Colonies at Albany. Franklin's plan of 1752 elaborated, "as he could get it," submitted to the twenty-five commissioners, with the motto, "Unite or die," and approved "pretty unanimously." It provided for a president-general, to be appointed and paid by the crown, and a grand council, to be elected by the colonial assemblies, "in proportion to the money arising out of each colony to the general treasury," "yet so as that the number to be chosen by any one province be not more than seven nor less than two," with stated annual meetings, "power to choose their speaker," power to make general laws, affecting Indian relations, new settlements, army and navy— "but they shall not impress men in any colony without the consent of the legislature;" to levy taxes—"rather discouraging luxury than loading industry with unnecessary burthens;" all laws made by them "shall not be repugnant, but as near as may be agreeable to the laws of England, and shall be transmitted to the king, in council for approbation," having previously received the assent of the president-general in America. This plan of union was rejected. "The Assemblies all thought there was too much prerogative in it, and in England it was thought to have too much of the democratic," wrote Franklin.

The French and Indian War, begun by a conflict between the colonial pioneers of England and France in America, and destined to settle the conflicting colonial claims of the two nations, was not formally declared until May 17, 1756, in Europe, where it became known as the Seven Years' War. 1756-63. Colonel Washington, at Fort Necessity, with 400 men, surrendered to the French, July 4. Tennessee first settled.

1755-63. Colonial Union prepared for, by the struggles and triumphs of the nine years of French and Indian war.

1755. Braddock defeated at Fort du Quesne, (Pittsburgh.) General Shirley appointed commander-in-chief, and calls a Council of War at New York.

1756. May 19. Great Britain declares war with France.

1757. The French successful at Oswego and Fort William Henry. Restoration of Liberty in Pennsylvania attempted by commissioning Franklin as agent to England, "to represent the unhappy state of the province, that all occasion of dispute hereafter might be removed by an act of the British legislature." Anti-colonial resolution in parliament, "that the claim of right in a colonial assembly to raise and apply public money by its own act alone, is derogatory to the crown and to the rights of the people of Great Britain," promoted discontent in the colonies. Disasters of the campaign felt by the colonists to be largely due to the inefficiency or cowardice of the English commanders, and accompanied by a deepening sense of the injustice of being required to supply men and money for operations in the management of which they had no voice. Somewhat more than half the army were colonial troops, and taxation became so heavy that it sometimes took two thirds the income of colonial land-owners.

1758. Massachusetts insisted on controlling its own war-fund. Lotteries granted by her legislature for the benefit of public works. Campaign favorable to English and colonial arms—the capture of Louisburg, Fort Frontenac and Fort-du-Quesne. Treaty of Easton, Pa. Peace with the Indians secured between the Ohio river and the lakes. Washington elected to the Virginia house of Congress.

1759. Project of Stamp Act rejected by English Prime Minister William Pitt: "I will never burn my fingers," said he, "with an American stamp act." British and colonial arms successful—capture of Forts Niagara, Ticonderoga, Crown Point and Quebec.

1760. War with the French ended by conquest of Canada, and the promised surrender of western outposts, and war with their Indian allies temporarily suspended. Colonial discontent increased by fresh orders for enforcement of navigation acts. Colonial self-government advocated by Franklin before the Board of Trade and Plantations in England, and generally accepted by American leaders as a right inherent in the people. Population of the colonies estimated at 310,000 blacks, and 1,385,000 whites.

1761. Writs of assistance from the Supreme Court of Massachusetts in support of the alleged right, under the Importation Act of 1733, of universal search for smuggled goods, argued before the court by James Otis, who inveighed against them "as instruments of slavery on the one hand, and villany on the other." "Then and there," said John Adams in later years, "was the first scene of the first act of opposition to the arbitrary claims of Great Britain. Then and there the child Independence was born." Slave trade discountenanced by heavy duties in Virginia and South Carolina.

1763. Canada and Florida ceded to England by Treaty of Paris, closing the French and Indian War. English domination in the West vainly resisted by the late Indian allies of the French, under Pontiac. Confiscation of vessels engaged in the contraband sugar trade with the colonies ordered by parliament, almost destroying colonial commerce with the West Indies. Colonial taxation and representation declared inseparable. The imposition of taxes only by the representatives of the people claimed by the colonists to be their constitutional right as Englishmen; and as they were represented only in their colonial assemblies, to these alone belonged the right to levy taxes and duties; great speech of Samuel Adams, in Boston, in vindication of the principle. "If we are not represented in the body that taxes us, and we submit," said he, "we are slaves."

1764. Future Union promoted, unconsciously, by an act of parliament restrictive of colonial commerce and known as "the Sugar Act," because of an increase of duty on that article. "If we are taxed," said the General Court of Massachusetts in relation to this act, "and not represented, we are slaves."

1765. Future Union further promoted by Stamp Act, and the acts that replaced it. The Stamp Act required the people to purchase for specified sums, and upon all written documents Government Stamps must be placed. This caused the most intense excitement and indignation in America.

Patrick Henry's Resolutions in assembly of Virginia, May 30, claimed equal rights with the people of England, and against the right of taxation.

James Otis, in General Court of Massachusetts, June 6, proposed to call "an American Congress."

Convention of Nine Colonies, attended by 28 delegates, at New York, October 27, was the result of Otis' proposition, who hoped that a union would be formed which would "knit and work into the very blood and bones of the original system, every region as fast as settled." They met "without the least claim of pre-eminence, one (colony) over the other." Said Gladsden: "We should stand upon the broad common ground of those natural rights that we all feel and know as men. * * * There ought to be no New England man, no New Yorker, known on the continent, but all of us Americans." It drew up a "Declaration of Rights," petitions to the king and parliament, and prepared for Independence and Union. It was declared in parliament to be "a Federal Union, assembled without any requisition on the part of the supreme power."

1766. "The Sons of Liberty" had become an organization which promised to embrace the continent.

Jonathan Mayhew asked, "would it not be decorous for our assembly (Mass.) to send circulars to all the rest, expressing a desire to cement union among ourselves? A good foundation for this has been laid by the Congress at New York." Dr. Franklin examined before the House of Commons.

May 18. Stamp Act repealed; great rejoicing in the Colonies. The English Parliament reasserted its right to tax the colonies and "to bind the colonies in all cases whatsoever." During the discussion Pitt declared, "You have no right to tax America. I rejoice that America has resisted. Three millions of our fellow-subjects so lost to every sense of virtue as tamely to give up their liberties would be fit instruments to make slaves of the rest." Parliament passes the "Mutiny Act." British troops to be sent to America, and their partial subsistence to be borne by the Colonies.

1767. Taxation laid on paper, glass, tea, and painter's colors. The colonies adopt non-importation agreements. The Governor of Massachusetts dismisses the Assembly, and refuses to call another. A band of citizens formed—"Regulators"—in North Carolina, claiming the regulation of local affairs, independent of the English Government. Mason and Dixon's run to define the boundaries between William Penn's heir's possessions, and that of Lord Baltimore. This line afterward became the line between the free and slave states. The New York Assembly forbidden by parliament to legislate until it should comply with the Mutiny Act of 1766.

1768. Circular Letter of Massachusetts to the assemblies of the other colonies, pronounced by the British government a "seditious paper," and the Assembly ordered to apologise for their "rash and hasty proceeding." Virginia responded by sending a message to all the colonies, stating the necessity of union. South Carolina unanimously directed its speaker to signify its approbation to both Virginia and Massachusetts. The British government stations a military force in Boston and New York, suspending, in the latter city, the Assembly for refusing to vote military supplies. Alarm of British officials throughout the colonies. "A general spirit of insurrection declared to be prevailing throughout the land." Intense excitement in Boston because of the seizure of the sloop Liberty, belonging to John Hancock, for alleged violation of the revenue law. The commissioners of customs obliged to seek safety in Fort Castle William.

1769. Resolutions of the House of Burgesses, of Virginia, claiming "the sole right of imposing taxes on the inhabitants," and asserting "the lawfulness and expediency of procuring a concert of the colonies in case of the violated rights of America," sent "to every legislature in America" for concurrence.

Resolutions of New York Assembly invited colonies without waiting for further aggressions, to elect delegates to "a General Congress, which should exercise legislative power for them all." The royal governors of North Carolina and Virginia dissolve the Assembly of each province. Boston refused to receive goods from Great Britain, and sent them back. Freedom of legislation menaced in the opinion of the Massachusetts Assembly by the presence of armed troops in Boston, and they declined to discuss any subject but the redress of grievances. Toryism and toadyism of New York Assembly censured by the people in mass meeting. The resolution declared by the Assembly to be "an infamous and scandalous libel."

1770. Intense hostility to British aggression cause the "Boston Massacre;" a mob composed of citizens of Boston attack the British soldiers, and, during the fray three citizens are killed and five wounded; first blood shed for independence. The military removed from the city on demand of the people. Soldiers cut down the people's emblem of freedom; the liberty pole in New York. Parliament re-asserts its right to tax the colonies, by retaining the duty on tea, upon the repeal of the act of 1767. Non-importation societies continued in the colonies as to tea.

1771. Rebellion in North Carolina against the government officers by the "Regulators"—(insurgents) against taxation, suppressed by Governor Tyron, and six Regulators hanged, which created intense hatred against the royal government. In 1768 the people of North Carolina were taxed $75,000 by Governor Tyron, to build him a house at Newbern.

1772. A party of Americans from Providence burn the British man-of-war *Gaspee* in Narragansett bay. Parliament passes an act requiring the payment of salaries of governor and judges from colonial funds, without the consent of the Assembly. Protest of the Massachusetts Assembly, which declared the act to be subversive of their chartered rights, and therefore void.

1773. The Virginia Assembly appoints a committee of correspondence to represent the colony in communicating with the other colonies. The anti-tea agitation continued throughout the colonies. Tea sent back from Philadelphia and New York on demand of the people. The citizens of Boston, Dec. 16, throw a cargo of tea into the ocean, which was sent by England in open disregard and violation of the act of the colonies against receiving any merchandise subject to tariff.

1774. The Boston Port Bill passes parliament, forbidding commerce with that city. General Gage arrives in Boston harbor, May 13, as commander of the royal forces in North America, and also empowered to act as governor of Massachussetts. Blockades Boston harbor, June 6, and interdicts all commerce. Executive power taken from the colonies, and their charter altered without consultation of the people. Massachussetts Assembly resolve themselves into a Provincial Congress, having refused to separate after being dissolved by the governor. The Colonies unite in approving the spirit of resentment shown by Massachusetts against the oppressive taxation of Great Britain. The governor of Virginia dissolves the House of Burgesses for non-compliance with his wishes. The Assembly constitutes itself the Provincial Assembly of Virginia, and declares for a General Congress, as suggested by New York in 1769. The colonies proceed to enlist and drill a portion of the citizens as minute-men, and appoint committees of safety and supply. Massachusetts calls for 12,000 men to be equipped for service. New York mechanics refuse to build barracks for British soldiers, and the merchants to sell them clothing. Great Britain prohibits the exportation of military stores.

THE CONFEDERATION.

On September 5 the first Continental Congress met in Philadelphia to enact measures for the regulation of order and for the protection of the people. Peyton Randolph, of Virginia, was elected President. This Congress was composed of 55 delegates from 12 colonies, Georgia not being represented. They prepared a petition to the king, declaring their loyalty, but demanding redress for their grievances. They wrote an "address to the people of Great Britain," a "Memorial to the inhabitants of the several British colonies," and an "Address to the inhabitants of the Province of Canada."

Congress indorsed non-importation, requesting colonial merchants "not to send any order to Great Britain, and to delay the execution of any order already sent;" they approved "the opposition of the inhabitants of Massachusetts Bay to the execution of the late acts of parliament; and if the same shall be attempted to be carried into execution by force, in such case all America ought to support them in their opposition:" they formulated a Declaration of Colonial Rights, and agreed upon fourteen articles of American Association. All of the Colonies, with the exception of New York, heartily concurred in the proceedings of the Continental Congress. Great Britain prohibited all the colonies except New York, Delaware and North Carolina, from fishing upon the coast of Newfoundland, and from trading with the West Indies. These colonies spurned the favor designed to only arouse a spirit of jealousy and disunion among the colonies, and submitted to the restriction much againt their pecuniary advantage. All law abolished except that vested in military officers, but the most perfect order and unanimity existed among the people.

1775. April 14. First society for the Abolition of Slavery formed in Philadelphia—Benjamin Franklin as president. April 19, the War of American Independence commenced with the battle of Lexington. Congress of Massachusetts, called for 35,000 men from New England. British reinforced at Boston. Arnold captures Titconderoga.

May 20. First Declaration of Independence by the people of North Carolina assembled in convention at Charlotte, who by a series of resolutions absolved their allegiance from the British Crown, organized a local government and made provisions for military defense, virtually declaring themselves free and independent. About 13 months before the general declaration was made by the Continental Congress. The resolutions adopted and so ratified and known as the "Mecklenburg Declaration of Independence," were as follows:

Resolved. 1. That whosoever directly or indirectly, abetted, or in any way, form or manner, countenanced the unchartered and dangerous invasion of our rights, as claimed by Great Britain, is an enemy to this country, to America, and to the independent and inalienable rights of man.

Resolved, 2. That we, the citizens of Mecklenburg county, do hereby dissolve the political bonds which have connected us with the mother country, and hereby absolve ourselves from all allegiance to the British crown, and adjure all political connection, contract, or association with that nation who have trampled on our rights and liberties, and inhumanly shed the blood of American patriots at Lexington.

Resolved, 3. That we do hereby declare ourselves a free and independent people; are, and of right ought to be, a sovereign and self governing association, under the control of no power other than that of our God and the general government of the congress, to the maintenance of which independence we solemnly pledge to each other our mutual co operation, our lives, our fortunes, and our most sacred honor.

Resolved, 4. That as we acknowledge the existance of no law, nor legal office, civil or military, within this country, we do hereby ordain and adopt, as a rule of life, all, each, and every of our former laws; wherein, nevertheless, the crown of Great Britain never can be considered as holding rights, privileges, immunities, or authority therein.

Resolved, 5. That it is further decreed that all, each, and every military officer in this county is hereby retained in his former command and authority, he acting conformably to these regulations. And that every member present to this delegation shall be a civil officer, viz.: A justice of the peace, in the character of a committee-man, to issue process, hear and determine all matters of controversy according to said adopted laws, and to preserve peace, union, and harmony in said county; and to use every exertion to spread the love of country and fire of freedom throughout America, until a general organized government be established in this province.

Ten days afterwards, on the 30th of May, the Mecklenburg committee met again at Charlotte, and adopted 20 other resolutions; but as all from the 4th to the 15th both exclusive, merely enter into the details of the temporary government established for the county, they need not be repeated here. The remainder of these resolutions on May 30 are as follows:

CHARLOTTE, MECKLENBURG COUNTY, May 30, 1775.—This day the committee of the county met and passed the following resolves:

Whereas, By an address presented to his majesty by both houses of parliament, in February last, the American colonies are declared to be in a state of actual rebellion, we conceive that all laws and commisions confirmed by or derived from the king and parliament are annuled and vacated, and the former civil constitution of these colonies for the present wholly suspended: To provide in some degree for the exigencies of this county in the present alarming period, we deem it proper and necessary to pass the following resolves, viz.:

1. That all commissions, civil or military, heretofore granted by the crown to be exercised in these colonies, are null and void, and the constitution of each particular colony wholly suspended.

2. That the provincial congress of each province, under the direction of the great continental congress, is invested with all legislative and executive powers within their respective provinces, and that no other legislative or executive power does or can exist at this time in any of these colonies.

3. As all former laws are now suspended in this province, and the congress has not provided others, we judge it necessary for the better preservation of good order, to form certain rules and regulations for the internal government of this county, until laws shall be provided for us by the congress.

16. *That whatever person shall hereafter receive a commission from the crown, or attempt any such commission heretofore received, shall be deemed an enemy to this country*; and upon confirmation being made to the captain of the company in which he resides, the said company shall cause him to be apprehended and conveyed before two selectmen, who, upon proof of the fact, shall commit said offender to safe custody, until the next sitting of the committee, who shall deal with him as prudence may direct.

17. That any person refusing to yield obedience to the above rules shall be considered equally criminal, and liable to the same punishment as the offenders last mentioned.

18. That these resolves be in full force and virtue until instructions from the provincial congress regulating the jurisprudence of the province shall provide otherwise, or the legislative body of Great Britain resign its unjust and abritrary pretentions in regard to America.

19. That the eight militia companies of this county provide themselves with proper arms and accoutrements, and hold themselves in readiness to execute the commands and directions of the general congress of this province and this committee.

20. That the committee appoint Col. Thomas Polk and Dr. Joseph Kennedy to purchase 300 pounds of powder, 600 pounds of lead, and 1,000 flints, for the use of the militia of this county, and deposit the same in such place as the committee may hereafter direct.

Signed by order of the committee.

EPHRAIM BREVARD, Clerk of the Committee.

About these resolutions there is no dispute whatever, for they were extensively published, soon after their date, in North Carolina, South Carolina, New York, Massachusetts, etc., and were the subject of a denunciatory proclamation from Gov. Martin himself. Why these should have been published and those of the 20th of May suppressed, is easy to understand, for at that time the earlier resolutions, known as the declaration of independence, were considered generally unadvised and premature, while the later ones were fully warranted by the situation, and were, indeed, necessary to the preservation of order. It is barely possible that the two sets of resolutions were once embodied together, and that prudential or other considerations caused them to be subsequently separated. However that may be, both sets of resolutions are really declarations of independence, full and complete, with only ten days between them—the difference being that those of May 30 are more-guarded than those of the 20th.

The Second Continental Congress convened at Philadelphia, May 10, delegates present from twelve colonies, Georgia remaining unrepresented until July, Peyton Randolph, of Virginia, elected president. Without a formal renunciation of allegiance they proceeded to assume several of the functions of a general government, sent a second petition to the king, which may be regarded as the last official expression of loyalty to the crown; ordered the issuing of $5,000,000 in paper money, and created a navy of 13 vessels. John Hancock of Massachusetts, elected president, May 24, to succeed Peyton Randolph, who had resigned to take his seat in the Virginia House of Burgesses.

1776. In March, Silas Deane, of Connecticut, was sent to France as Ambassador, and obtained arms, money, and cordial sympathy for his country. British evacuation of Boston greatly encouraged the patriots throughout the country. South Carolina adopts a State Constitution. Rhode Island proclaims her independence. The Virginia House of Burgesses urges her delegates in Congress to work for Colonial independence. Congress recommends to the several Colonial Assemblies that they "adopt such governments as shall best conduce to the happiness and safety of their constituents in particular, and America in general." Congress abrogates British authority in the colonies, and declares British property a lawful prize. Lee's resolutions, June 7, in Congress, formally enunciates independence.

A committee to draft a declaration of independence appointed June 8. George Washington appointed commander in chief of the American Army—June 15. Virginia convention adopts a declaration of rights. Lee's Resolutions passed by twelve Colonies—July 2. In the absence of instructions the New York delegates declined to vote. The Declaration of Independence adopted by Congress July 4.—The Birth of the Nation.—

DECLARATION OF INDEPENDENCE.

WHEN, in the course of human events, it becomes necessary for one people to dissolve the political bonds which have connected them with another, and to assume, among the powers of the earth, the separate and equal station to which the laws of nature and of nature's God entitle them, a decent respect to the opinions of mankind requires that they should declare the causes which impel them to the separation.

We hold these truths to be self-evident—that all men are created equal; that they are endowed by their Creator with certain unalienable rights; that among these, are life, liberty, and the pursuit of happiness.

That, to secure these rights, governments are instituted among men, deriving there just powers from the consent of the governed; that whenever any form of government becomes destructive of these ends, it is the right of the people to alter or abolish it, and to institute a new government, laying its foundations on such principles, and organizing its powers in such form, as to them shall seem most likely to effect their safety and happiness. Prudence, indeed, will dictate that governments long established should not be changed for light and transient causes; and, accordingly, all experience hath shown that mankind are more disposed to suffer, while evils are sufferable, than to right themselves by abolishing the forms to which they are accustomed. But, when a long train of abuses and usurpations, pursuing invariably the same object, evinces a design to reduce them under absolute despotism, it is there right, it is their duty, to throw off such government, and to provide new guards for their future security.

Such has been the patient sufferance of these colonies, and such is now the necessity which constrains them to alter their former systems of government. The history of the present king of Great Britain is a history of repeated injuries and usurpations, all having, in direct object, the establishment of an absolute tyranny over these states. To prove this, let facts be submitted to a candid world:—

He has refused his assent to laws the most wholesome and necessary for the public good.

He has forbidden his governors to pass laws of immediate and pressing importance, unless suspended in their operation till his assent should be obtained; and, when so suspended, he has utterly neglected to attend to them.

He has refused to pass other laws for the accommodation of large districts of people, unless those people would relinquish the right of representation in the legislature; a right inestimable to them, and formidable to tyrants only.

He has called together legislative bodies at places unusual, uncomfortable, and distant from the depository of their public records, for the sole purpose of fatiguing them into compliance with his measures.

He has dissolved representative houses repeatedly, for opposing, with manly firmness, his invasions on the rights of the people.

He has refused, for a long time after such dissolutions, to cause others to be elected; whereby the legislative powers, incapable of annihilation, have returned to the people at large for their exercise; the state remaining, in the meantime, exposed to all the danger of invasion from without, and convulsions within.

He has endeavored to prevent the population of these states;—for that purpose, obstructing the laws for naturalization of foreigners; refusing to pass others to encourage their migration hither, and raising the conditions of new appropriations of lands.

He has obstructed the administration of justice, by refusing his assent to laws for establishing judiciary powers.

He has made judges dependent on his will alone, for the tenure of their offices, and the amount and payment of their salaries.

He has erected a multitude of new offices, and sent hither swarms of officers to harass our people, and eat out their substance.

He has kept among us, in times of peace, standing armies, without the consent of our legislatures.

He has affected to render the military independent of, and superior to, the civil power.

He has combined with others to subject us to a jurisdiction foreign to our constitution, and unacknowledged by our laws; giving his assent to their acts of pretended legislation:

For quartering large bodies of troops among us.

For protecting them by a mock trial, from punishment, for any murders which they should commit on the inhabitants of these states:

For cutting off our trade with all parts of the world:

For imposing taxes on us without our consent:

For depriving us, in many cases, of the benefit of trial by jury:

For transporting us beyond seas to be tried for pretended offenses

For abolishing the free system of English laws in a neighboring province, establishing therein an arbitrary government, and enlarging its boundaries so as to render it at once an example and fit instrument for introducing the same absolute rule into these colonies:

For taking away our charters, abolishing our most valuable laws, and altering, fundamentally, the powers of our governments:

For suspending our own legislatures, and declaring themselves invested with power to legislate for us in all cases whatsoever.

He has abdicated government here, by declaring us out [illegible] protection, and waging war against us.

He has plundered our seas, ravaged our coasts, burnt our towns, and destroyed the lives of our people.

He is, at this time, transporting large armies of foreign mercenaries to complete the works of death, desolation, and tyranny, already begun, with circumstances of cruelty and perfidy scarcely paralleled in the most barbarous ages, and totally unworthy the head of a civilized nation.

He has constrained our fellow-citizens, taking captive on the high seas, to bear arms against their country, to become the executioners of their friends and brethren, or to fall themselves by their hands.

He has excited domestic insurrections amongst us, and has endeavored to bring on the inhabitants of our frontiers, the merciless Indian savages, whose known rule of warfare is an undistinguished destruction of all ages, sexes, and conditions.

In every stage of these oppressions, we have petitioned for redress, in the most humble terms; our repeated petitions have been answered only by repeated injury. A prince, whose character is thus marked by every act which may define a tyrant, is unfit to be the ruler of a free people.

Nor have we been wanting in attention to our British brethren. We have warned them, from time to time, of attempts made by their legislature to extend an unwarrantable jurisdiction over us. We have reminded them of the circumstances of our emigration and settlement here. We have appealed to their native justice and magnanimity, and we have conjured them, by the ties of our common kindred, to disavow these usurpations, which would inevitably interrupt our connections and correspondence. They, too, have been deaf to the voice of justice and consanguinity. We must, therefore, acquiesce in the necessity which denounces our separation, and hold them, as we hold the rest of mankind, enemies in war, in peace, friends.

We, therefore, the representatives of the United States of America, in general Congress assembled, appealing to the Supreme judge of the world for the rectitude of our intentions, do, in the name, and by the authority of the good people of these colonies, solemnly publish and declare, that these United Colonies are, and of right ought to be, free and independent states; that they are absolved from all allegiance to the British crown, and that all political connection between them and the state of Great Britain, is, and ought to be, totally dissolved; and that, as free and independent states, they have full power to levy war, conclude peace, contract alliances, establish commerce and to do all other acts and things which Independent States may do, and, for the support of this Declaration, with a firm reliance on the protection of divine providence, we mutually pledge to each other our lives, our fortunes and our sacred honor.

The foregoing declaration was, by order of congress, engrossed, and signed by the following members;

JOHN HANCOCK, President.

(Here follows the signatures of 55 members,)

Congress exercised its sovereignty by passing a pension act and a homestead act in favor of those who should serve in the army to the close of the war—also by refusing to confer with British commissioners except on the basis of recognition of independence.

Eleven of the 13 States established a second branch of legislature, calling it a Senate, and agreed on the appointment of a governor or head of each State.

Adoption of State constitutions by New Jersey (July 2). Virginia (July 5), Pennsylvania (July 15), Maryland (Aug. 14), Delaware (Sept. 20), North Carolina (Dec. 18); and New York declared her independence of Great Britain. Proclamation of pardon by the British commander to all who would lay down their arms.

The States agreed in deriving their power of government from the people; and in no case was the smallest title or power to be exercised from hereditary right. All hereditary privileges and religions establishments were declared abolished—thereby destroying the alliance between Church and State, and leveling all social distinctions.

In December Congress met in Baltimore, and resolved upon prosecuting the war, redoubling their energies.

The Continental Congress carried on the affairs of the country until the war had almost closed; but in order to form a more efficient union a confederation of the States was formed under certain articles, called Articles of Confederation and Perpetual Union between the States. They were to go into effect when the assent of all the States was gained.

The Articles of Confederation reported July 12, '76, and debated from day to day, and time to time, for two years, were ratified July 9, '78, by ten States; by New Jersey on the 26th of November of the same year; and by Delaware on the 23d of February following. Maryland, alone, held off two years more, acceding to them

March 1, '81, and thus closing the obligation. The following are the Articles:

ARTICLES OF CONFEDERATION AND PERPETUAL UNION BETWEEN THE STATES.

To all whom these Presents shall come, We, the undersigned Delegates of the States affixed to our names send greeting—Whereas, the Delegates of the United States of America, in Congress assembled, did, on the 15th day of November, in the year of our Lord, 1777, and in the Second Year of the Independence of America, agree to certain articles of Confederation and Perpetual Union between the States of New Hampshire, Massachusetts Bay, Rhode Island and Providence Plantations, Connecticut, New York, New Jersey, Pennsylvania, Delaware, Maryland, Virginia, North Carolina, South Carolina and Georgia, in the words following, viz:

"*Articles of Confederation and Perpetual Union between the States of New Hampshire, Mssachusetts Bay, Rhode Island and Providence Plantations, Connecticut, New York, New Jersey, Pennsylvania, Delaware, Maryland, Virginia, North Carolina, South Carolina and Georgia.*

ARTICLE 1. The style of this Confederacy shall be "The United States of America."

ART. 2. Each State retains its sovereignty, freedom and independence, and every power, jurisdiction, and right, which is not by this confederation expressly delegated to the United States in Congress assembled.

ART. 3. The said States hereby severally enter into a firm league of friendship with each other for their common defence, the security of their liberties, and their mutual and general welfare, binding themselves to assist each other against all force offered to, or attacks made upon them, or any of them, on account of religion, sovereignty, trade, or any other pretence whatever.

ART. 4. The better to secure and perpetuate mutual friendship and intercourse among the people of the different States in this Union, the free inhabitants of each of these States—paupers, vagabonds, and fugitives from justice excepted—shall be entitled to all privileges and immunities of free citizens in the several States; and the people of each State shall have free ingress and egress to and from any other State, and shall enjoy therein all the privileges of trade and commerce, subject to the same duties, impositions and restrictions, as the inhabitants thereof respectively, provided such restriction shall not extend so far as to prevent the removal of property, imported into any State, to any other State of which the owner is an inhabitant; provided also, that no imposition, duties or restriction shall be laid by any State on the property of the United States, or either of them.

If any person guilty of or charged with treason, felony, or other high misdemeanor in any State, shall flee from justice, and be found in any of the United States, he shall, upon demand of the Governor, or executive power of the State from which he fled, be delivered up and removed to the State having jurisdiction of his offense.

Full faith and credit shall be given in each of these States, to the records, acts, and judicial proceedings of the courts and magistrates of every other State.

ART. 5. For the more convenient management of the general interest of the United States, Delegates shall be annually appointed in such manner as the legislature of each State shall direct, to meet in Congress on the first Monday in November, in every year, with a power reserved to each State, to recall its Delegates, or any of them, at any time within the year, and to send others in their stead, for the remainder of the year.

No State shall be represented in Congress by less than two, nor by more than seven members; and no person shall be capable of being a Delegate for more than three years in any term of six years; nor shall any person, being a Delegate, be capable of holding any office under the United States, for which he, or another for his benefit, receives any salary, fees, or emolument of any kind.

Each State shall maintain its own Delegates in any meeting of the States, and while they act as members of the Committee of the States.

In determining questions in the United States in Congress assembled, each State shall have one vote.

Freedom of speech and debate in Congress shall not be impeached or questioned in any court or place, out of Congress, and the members of Congress shall be protected in their persons from arrests and imprisonments, during the time of their going to and from, and attendance on Congress, except for treason, felony, or breach of the peace.

ART. 6. No State, without the consent of the United States in Congress assembled, shall send an embassy to, or receive an embassy from, or enter into any conference, agreement, alliance, or treaty with any King, Prince or State; nor shall any person holding office of profit or trust under the United States, or any of them, accept of any present, emolument, office or title of any kind whatever from any King, Prince, or Foreign State; nor shall the United States in Congress assembled, or any of them, grant any title of nobility.

No two or more States shall enter into any treaty, confederation or alliance whatever between them, without the consent of the United States in Congress assembled, specifying accurately the purposes for which the same is to be entered into, and how long it shall continue.

No State shall lay any imposts or duties which may interfere with any stipulations in treaties entered into by the United States in Congress assembled, with any King, Prince or State, in pursuance of any treaties already proposed by Congress, to the Courts of France and Spain.

No vessels of war shall be kept up in time of peace by any State except such number only, as shall be deemed necessary by the United States in Congress assembled, for the defense of such State, or its trade; nor shall any body of forces be kept up by any State, in time of peace, except such number only, as in the judgment of the United States in Congress assembled, shall be deemed requisite to garrison the forts necessary for the defense of such State; but every State shall always keep up a well regulated and disciplined militia, sufficiently armed and accoutred, and shall provide and have constantly ready for use, in public stores, a due number of field pieces and tents, and a proper quantity of arms, ammunition and camp equipage.

No State shall engage in any war without the consent of the United States in Congress assembled, unless such State be actually invaded by enemies, or shall have received certain advice of a resolution being formed by some nation of Indians to invade such a State, and the danger is so imminent as not to admit of a delay, till the United States in Congress assembled can be consulted; nor shall any State grant commissions to any ships or vessels of war, nor letters of marque or reprisal, except it be after a declaration of war by the United States in Congress assembled, and then only against the Kingdom or State, and the subjects thereof, against which war has been so declared, and under such regulations as shall be established by the United States in Congress assembled, unless such State be infested by pirates, in which case vessels of war may be fitted out for that occasion, and kept so long as the danger shall continue, or until the United States in Congress assembled, shall determine otherwise.

ART. 7. When land forces are raised by any State for the common defense, all officers of or under the rank of colonel, shall be appointed by the legislature of each State respectively, by whom such forces shall be raised, or in such manner as such State shall direct, and all vacancies shall be filled up by the State which first made the appointment.

ART. 8. All charges of war, and all other expenses that shall be incurred for the common defense or general welfare, and allowed by the United States in Congress assembled, shall be defrayed out of a common treasury, which shall be supplied by the several States, in proportion to the value of all land within each State, granted to or surveyed for any person, as such land and the buildings and improvements thereon shall be estimated according to such mode as the United States in Congress assembled shall from time to time direct and appoint. The taxes for paying that proportion shall be laid and levied by the authority and direction of the legislatures of the several States within the time agreed upon by the United States in Congress assembled.

ART. 9. The United States in Congress assembled shall have the sole and exclusive right and power of determining on peace and war, except in the cases mentioned in the 6th article—of sending and receiving ambassadors—entering into treaties and alliances, provided that no treaty of commerce shall be made whereby the legislative power of the respective States shall be restrained from imposing such imposts and duties on foreigners, as their own people are subjected to, or from prohibiting the exportation or importation of any species of goods or commodities whatsoever—of establishing rules for deciding in all cases what captures on land or water shall be legal, and in what manner prizes taken by land or naval forces in the service of the United States shall be divided or appropriated—of granting letters of marque and reprisal in times of peace—appointing courts for the trial of piracies and felonies committed on the high seas, and establishing courts for receiving and determining finally appeals in all cases of captures, provided that no member of Congress shall be appointed a judge of any of the said courts.

The United States in Congress assembled shall also be the last resort on appeals in all disputes and differences now subsisting, or that hereafter may arise between two or more States concerning boundary, jurisdiction, or any other cause whatever; which authority shall always be exercised in the manner following:—Whenever the legislative or executive authority or lawful agent of any State in controversy with another shall present a petition to Congress, stating the matter in question, and praying for a hearing, notice thereof shall be given by order of Congress, to the legislative or executive authority of the other State in controversy, and a day assigned for the appearance of the parties by their lawful agents, who shall then be directed to appoint, by joint consent, commissioners or judges to constitute a court for hearing and determining the matter in question; but if they cannot agree, Congress shall name three persons out of each of the United States, and from the list of such persons each party shall alternately strike out one, the petitioners beginning, until the number shall be reduced to thirteen; and from that number not less than seven, nor more than nine names, as Congress shall direct, shall in the presence of Congress be drawn out by lot, and the persons whose names shall be so drawn or any five of them, shall be commissioners or judges, to hear and finally determine the controversy, so always as a major part of the judges who shall hear the cause shall agree in the determination; and if either party shall neglect to attend at the day appointed, without showing reasons which Congress shall judge sufficient, or being present shall refuse to strike, the Congress shall proceed to nominate three persons out of each State, and the Secretary of Congress shall strike in behalf of such party absent or refusing; and the judgment and sentence of the court to be appointed, in the manner above prescribed, shall be final and conclusive; and if any of the parties shall refuse to submit to the authority of such court, or to appear or defend their claim or cause, the court shall, nevertheless, proceed to pronounce sentence or judgment, which shall in like manner be final and decisive, the judgment or sentence and other proceedings being in either case transmitted to Congress and lodged among the acts of Congress for the security of the parties concerned; provided that every commissioner, before he sits in judgment, shall take an oath, to be administered by one of the judges of the Supreme or Superior Court of the State where the cause shall be tried, "well and truly to hear and determine the matter in question, according to the best of his judgment, without favor, affection, or hope of reward;" provided also that no State shall be deprived of territory for the benefit of the United States.

All controversies concerning the private right of soil claimed under different grants of two or more States, whose jurisdictions as they may respect such lands, and the States which passed such grants, are adjusted; the said grants, or either of them, being at the same time claimed to have originated antecedent to such settlement of jurisdiction, shall, on the petition of either party to the Congress of the United States, be finally determined as near as may be in the same manner as is before prescribed for deciding disputes respecting territorial jurisdiction between different States.

The United States in Congress assembled shall also have the sole exclusive right and power of regulating the alloy and value of coin struck by their own authority, or by that of the respective States—fixing the standard of weights and measures throughout the United States—regulating the trade and managing all affairs with the Indians, not members of any of the States; provided that the legislative right of any State within its own limits be not infringed or violated—establishing or regulating post-offices from one State to another, throughout all the United States, and exacting such postage on the papers passing through the same as may be requisite to defray the expenses of the said office—appointing all officers of the land forces in the service of the United States, excepting regimental officers—appointing all the officers of the naval forces, and commissioning all officers whatever in the service of the United States—making rules for the government and regulation of the said land and naval forces, and directing their operations.

The United States in Congress assembled shall have authority to appoint a committee, to sit in the recess of Congress, to be denominated "A Committee of the States," and to consist of one delegate from each State; and to appoint such other committees and civil officers as may be necessary for managing the general affairs of the United States, under their direction—to appoint one of their number to preside; provided that no person be allowed to serve in the office of president more than one year in any term of three years—to ascertain the necessary sums of money to be raised for the service of the United States, and to appropriate and apply the same for defraying the public expenses—to borrow money, or emit bills on the credit of the United States, transmitting every half year to the respective States an account of the sums of money so borrowed or emitted—to build and equip a navy—to agree upon the number of land forces, and to make requisitions from each State for its quota, in proportion to the number of white inhabitants in such State; which requisition shall be binding; and thereupon the legislatures of each State shall appoint the regimental officers, raise the men, and clothe, arm, and equip them in a soldier like manner, at the expense of the United States; and the officers and men so clothed, armed, and equipped, shall march to the place appointed, and within the time agreed on by the United States in Congress assembled; but if the United States in Congress assembled shall, on consideration of circumstances, judge proper that any State should not raise men, or should raise a smaller number than its quota, and that any other State should raise a greater number of men than the quota thereof, such extra number shall be raised, officered, clothed, armed, and equipped in the same manner as the quota of such State, unless the legislature of such State shall judge that such extra number cannot be safely spared out of the same; in which case they shall raise, officer, clothe, arm, and equip as many of such extra number as they judge can be safely spared. And the officers and men so clothed, armed, and equipped, shall march to the place appointed, and within the time agreed on by the United States in Congress assembled.

The United States in Congress assembled shall never engage in a war, nor grant letters of marque and reprisal in time of peace, nor enter into any treaties or alliances, nor coin money, nor regulate the value thereof, nor ascertain the sums and expenses necessary for the defence and welfare of the United States, or any of them, nor emit bills, nor borrow money on the credit of the United States, nor appropriate money, nor agree upon the number of vessels of war to be built or purchased or the number of land or sea forces to be raised, nor appoint a commander-in-chief of the army or navy unless nine States assent to the same; nor shall a question on any other point, except from adjourning from day to day, be determined, unless by the votes of a majority of the United States in Congress assembled.

The Congress of the United States shall have power to adjourn to any time within the year, and to any place within the United States, so that no period of adjournment be for a longer duration than the space of six months, and shall publish the journal of their proceedings monthly, except such parts thereof relating to treaties, alliances, or military operations, as in their judgment require secrecy; and the yeas and nays of the delegates of each State on any question shall be entered on the journal when it is desired by any delegate; and the delegates of a State, or any of them, at his or their request, shall be furnished with a transcript of the said journal, except such parts as are above excepted, to lay before the legislatures of the several States.

ART. 10. The committee of the States, or any nine of them, shall be authorized to execute, in the recess of Congress, such of the powers of Congress as the United States in Congress assembled, by the consent of nine States, shall, from time to time, think expedient to vest them with; provided that no power be delegated to the said committee; for the exercise of which, by the articles of Confederation, the voice of nine States in the Congress of the United States assembled is requisite.

ART. 11. Canada, acceding to this confederation and joining in the measures of the United States, shall be admitted into, and entitled

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to all the advantages of this union; but no other colony shall be admitted into the same unless such admission be agreed to by nine States.

ART. 12. All bills of credit emitted, moneys borrowed, and debts contracted by, or under the authority of Congress, before the assembling of the United States, in pursuance of the present confederation, shall be deemed and considered as a charge against the United States, for payment and satisfaction whereof, the said United State4 and the public faith are hereby solemnly pledged.

ART. 13. Every State shall abide by the determinations of the United States in Congress assembled on all questions which, by this confederation, are submitted to them. And the articles of this confederation shall be inviolably observed by every State, and the union shall be perpetual; nor shall any alteration at any time hereafter be made in any of them, unless such alteration be agreed to in a Congress of the United States, and be afterward confirmed by the legislatures of every State.

And Whereas, It hath pleased the Great Governor of the World to incline the hearts of the legislatures we respectively represent in Congress, to approve of and to authorize us to ratify the said Articles of Confederation and perpetual union: Know Ye that we, the undersigned delegates, by virtue of the power and authority to us given for that purpose, do, by these presents, in the name and in behalf of our respective constituents, fully and entirely ratify and confirm each and every of the said Articles of Confederation and perpetual Union, and all and singular the matters and things therein contained. And we do further solemnly plight and engage the faith of our respective constituents, that they shall abide by the determinations of the United States in Congress assembled on all questions which, by the said confederation, are submitted to them. And that articles thereof shall be inviolably observed by the States we respectively represent, and that the Union shall be perpetual. In witness whereof we have hereunto set our hands in Congress. Done at Philadelphia, in the State of Pennsylvania, the 9th day of July, in the year of our Lord 1778, and in the 3d year of the Independence of America.

1777. Independence of Vermont with abolition of slavery. March 15. Georgia and New York adopt State Constitutions. France furnishes valuable financial aid to the government. Congress returns to Philadelphia, March 4. Owing to the inhuman treatment of Americans in British prison-ships, Washington refuses to exchange prisoners. Congress adopts the United States flag. First anniversary of American Independence celebrated. Congress removes to Lancaster, Sept. 27th. and thence to York, Pa., Sept. 30. British troops enter Philadelphia, Sept. 26, Board of War created to replace the committee of Congress. December 16, France acknowledges Independence of the United States. North Carolina adopts a Constitution, Dec. 18.

1778. February 6, treaty of Alliance formed with France. March 20, American Commissioners received at the Court of France, as the representatives of the Republic. The British Parliament pass an act granting all that the colonies asked, but Congress rejects their offers. A French fleet arrives in America, July 11. Lord North's conciliatory bill passed by parliament. United States territory increased by the conquest of the Northwest, by Virginia troops under Col Clark. Articles of Confederation adopted by Congress and ratified by all the States, Nov. 15.

The Whig, Patriot or Revolutionary party, divided in Congress, in the State legislatures and among the people at large into two sections, which might be designated as State-rights Whigs and Strong-government Whigs, both being in accord as to the prosecution of the war and separation from Great Britain, but differing as to the powers to be entrusted to the central or union government. The form adopted was a genuine political victory to the former, who were in a majority and in the main had control of the government, although several of the most active civil and military leaders in the Revolution were of the opposite section. "The States separately," said Washington, "are too much engaged in their local concerns. If the great whole is mismanaged, the States individually must sink into the general wreck."

1779. Financial credit of the United States very low, its bills being worth in gold only about three per cent. of their face value. Great naval victory of Paul Jones. An American minister to Spain commissioned. Samuel Huntington, of Connecticut, chosen president. A Board of Admiralty replaced naval committee of Congress. Owing to the diminished numbers of American troops, military operations were greatly restricted.

1780. Feb. 6, Congress calls on the States to enlarge the army to 35,000 men. Gradual abolition of slavery enacted by Pennsylvania. Treason of Arnold discovered, and execution of Major Andre. French aid of 6,000 troops received by the United States. A State constitution adopted by Massachusetts. Negotiations with Holland, then at war with England, begun by United States. Dec. 30, a National Thanksgiving.

1781. Jan. 1. Revolt of the Pennsylvania line at Morristown. Bank of North America established. March 1, Maryland (last of the 13 States to accept) adopts the Articles of Confederation. Congress assembles, March 2, under the Articles of Confederation, and chooses Thomas McKean, of Delaware, president. By the surrender of Lord Cornwallis at Yorktown to the combined French and American army and navy, Oct. 19, the War of the Revolution closed.

1782. Resolutions passed in the House of Commons in favor of peace, Feb. 6. Holland recognizes the Independence of the United States April 17. Suggestion of kingship spurned by Washington. "My eyes have grown dim," said he, "in the service of my country; but I have never doubted her justice." An emblem of National sovereignty adopted by Congress in the great seal of the United States, and its motto *E pluribus Unum.* Parliament authorizes the king in May, to make peace. Elias Bondinot, of New Jersey, made president of Congress, Nov. 4. Preliminary treaty of peace with Great Britain, Nov. 30.

1783. Independence of the United States recognized by Sweden, Denmark and Russia, successively. Preliminary treaties between France, Spain and Great Britain signed at Versailles, Jan. 20. Cessation of hostilities proclaimed by Washington. Independence of the United States established by a definite treaty of peace with Great Britain, Sept. 3. Evacuation of New York, their last foothold, by the British. Final emigration of Tories. Proclamation for the disbanding of the army, Oct. 18. Surrender of his commission by Washington, Dec. 23. A State constitution, with abolition of slavery, adopted by New Hampshire, to take effect in June, 1784.

1784. Great distress prevailed owing to the scarcity of money.

1785. Commercial treaties between the United States and Prussia, Denmark and Portugal. Jefferson sent as Minister to France, and John Adams to England.

1786. The peace of the country threatened by financial embarrassment. A project of separation into three confederacies was entertained by some. Insurgents in western North Carolina formed the short-lived State of Frankland. There was an insurrection against Pennsylvania in the Wyoming valley. The territory of Maine projected a revolt from Massachusetts and the formation of a State. At Exeter, New Hampshire, a mob demanded of the legislature the issue of paper money and a remission of taxes.

In December, what is known as Shay's rebellion in Massachusetts attempted the overthrow of law and order, and the establishment of mob force, prompt and decisive measures suppressed it.

In September, the delegates of Virginia, Pennsylvania, Delaware, New Jersey and New York assembled at Annapolis to deliberate on the subject indicated. The result of their deliberations was that they advised Congress to call a convention to revise the Articles of Confederation.

1787. In February, Congress passed a resolution calling on the States to send delegates to a general convention for "the sole and express purpose of revising the Articles of Confederation, and reporting to Congress and the several legislatures such alterations and provisions therein as should, when agreed to in Congress and confirmed by the States, render the Federal Constitution adequate to the exigencies of the government and the preservation of the Union."

Pursuant to the call of Congress, the Constitutional Convention met, May 25, at Philadelphia. It was organized by the election of Washington as presiding officer, and extended its deliberations to September 17, and sent forward to Congress, the Constitution as it now stands, minus the amendments since added. The Constitution was signed by thirty-nine of the fifty-five delegates composing the Convention, but of the other sixteen, some were absent, and only three of those present refused to sign.

Northwest Territory.—During the session of the Convention an act, only less momentous than the Constitution in its influence on liberty, was passed by Congress under the following title: "An ordinance for the government of the territory of the United States northwest of the Ohio," in which, among other valuable provisions, it was ordained that "There shall be neither slavery nor involuntary servitude in the said territory, otherwise than in the punishment of crimes, whereof the party shall have been duly convicted."

Congress, on Sept. 28, "Resolved, that the said report (the Constitution with the resolution and letter accompanying the same) be transmitted to the several legislatures, in order to be submitted to a convention of delegates chosen in each State by the people thereof, in conformity to the resolves of the Convention made and provided in that case."

Confederation of the Original States.—On Monday, the 5th of September, 1774, there were assembled at Carpenter's Hall, in the city of Philadelphia, a number of men who had been chosen and appointed by the several colonies in North America to hold a Congress for the purpose of discussing certain grievances imputed against the mother country. This Congress resolved, on the next day, that each colony should have one vote only On Tuesday, the 2d of July, 1776, the Congress resolved, "That these United Colonies are, and of right ought to be, Free and Independent States," etc., etc.: and on Thursday, the 4th July, the whole Declaration of Indpendence having been agreed upon, it was publicly read to the people. Shortly after, on the 9th of September, it was resolved that the words "United Colonies" should be no longer used, and that the "United States of America" should thenceforward be the style and title of the Union. On Saturday, the 15th of November, 1777, "Articles of Confederation and Perpetual Union of the United States of America" were agreed to by the State delegates, subject to the ratification of the State legislatures severally. Eight of the States ratified these articles on the 9th July, 1778; one on the 21st July; one on the 24th July; one on the 26th November of the same year; one on the 22d February, 1779; and the last one on the 1st March, 1781. Here was a bond of union between thirteen independent States, whose delegates in Congress legislated for the general welfare, and executed certain powers so far as they were permitted by the articles aforesaid. The following are the names of the Presidents of the Continental Congress, from 1774 to 1788:

Peyton Randolph, Virginia	5th Sept., 1774.
Henry Middleton, South Carolina	22d Oct., 1774.
Peyton Randolph, Virginia	10th May, 1775.
John Hancock, Massachusetts	24th May, 1776.
Henry Lauren, South Carolina	1st Nov., 1777.
John Jay, New York	10th Dec., 1778.
Samuel Huntington, Connecticut	28th Sept., 1779.
Thomas McKean, Delaware	10th July, 1781.
John Hanson, Maryland	5th Nov., 1781.
Elias Bondinot, New Jersey	4th Nov., 1782.
Thomas Mifflin, Pennsylvania	3d Nov., 1783.
Richard Henry Lee, Virginia	30th " 1784.
Nathaniel Gorham, Massachusetts	6th Jun., 1786.
Arthur St. Clair, Pennsylvania	2d Feb., 1787
Cyrus Griffin, Virginia	23d Jan., 1788.

The seat of government was established as follows: At Philadelphia, Pa., commencing September 5, 1774, and May 10, 1775; at Baltimore, Md., December 20, 1776; at Philadelphia, Pa., March 4; 1777; at Lancaster, Pa., September 27, 1777; at York, Pa., September 30, 1777; at Philadelphia, Pa., July 2, 1778; at Princeton, N. J., June 30, 1783; at Annapolis, Md., November 26, 1783; at Trenton, N. J., November 1, 1784; and at New York City, N. Y., January 11, 1785.

On the 4th March, 1789, the present Constitution, which had been adopted by a convention and ratified by the requisite number of States, went into operation.

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CONSTITUTION OF THE UNITED STATES, WITH AMENDMENTS.

We, the People of the United States, in Order to form a more perfect Union, establish Justice, insure domestic Tranquility, provide for the common defence, promote the general Welfare, and secure the Blessings of Liberty to ourselves and our Posterity, do ordain and establish this Constitution for the United States of America.

ARTICLE I.

SECTION 1. All legislative Powers herein granted shall be vested in a Congress of the United States, which shall consist of a *Senate* and *House of Representatives.*

SEC. 2. The House of Representatives shall *be composed* of Members chosen every second year by the people of the several States, and the Electors in each State shall have the Qualifications requisite for electors of the most numerous Branch of the State Legislature.

No person shall be a Representative who shall not have *attained to* the age of twenty-five years, and been seven years a citizen of the *United States*, and who shall not, when elected, be an Inhabitant of that State in which he shall be chosen.

Representative and *direct Taxes* shall be apportioned among the several States which may be included within this Union, according to their respective numbers, which shall be determined by adding to the whole number of free persons, including those bound to Service for a Term of Years, and excluding Indians not taxed, three-fifths of all other persons. The actual Enumeration shall be made within three years after the first meeting of the Congress of the United States, and within every subsequent Term of ten years, in such manner as they shall by law direct. The number of Representatives shall not exceed one for every thirty thousand, but each State shall have at least one Representative; and until such enumeration shall be made, the State of New Hampshire shall *be entitled* to choose three, Massachusetts eight, Rhode Island and Providence Plantations one; Connecticut five, New York six, New Jersey four, Pennsylvania eight, Delaware one, Maryland six, Virginia ten, North Carolina five, South Carolina five, and Georgia three.

When vacancies happen in the Representation from any State, the Executive Authority thereof shall issue Writs of Election to fill such vacancies.

The House of Representatives shall choose their Speaker and other officers; and shall have the sole Power of Impeachment.

SEC. 3. The Senate of the United States shall be composed of two Senators from each State, chosen by the Legislature thereof, for six years; and each Senator shall have one vote.

Immediately after they shall be assembled in consequence of the first Election, they shall be divided as equally as may be into three classes. The Seats of the Senators of the first class shall be vacated at the expiration of the second year, of the second class at the expiration of the fourth year, and of the third class at the expiration of the sixth year, so that one-third may be chosen every second year; and if vacancies happen by resignation, or otherwise, during the recess of the legislature of any State, the Executive thereof may make temporary appointments until the next meeting of the Legislature, which shall then fill such vacancies.

No person shall be a Senator who shall not have *attained to* the age of thirty years, and been nine years a citizen of the United States, and who shall not, when elected, be *an inhabitant* of that State for which he shall be chosen.

The *Vice-President* of the United States shall be President of the Senate, but shall have no vote, unless they be equally divided.

The Senate shall choose their other officers, and also a president *pro tempore*, in the absence of the Vice President, or when he shall exercise the office of President of the United States.

The Senate shall have the sole Power to try all Impeachments. When sitting for that purpose, they shall be on Oath or Affirmation. When the President of the United States is tried, the Chief Justice shall preside: and no person shall be convicted without the concurrence of two-thirds of the Members present.

Judgment in Cases of Impeachment shall not extend further than to removal from Office, and disqualification to hold and enjoy any Office of honor, Trust or Profit under the United States; but the party convicted shall nevertheless be liable and subject to Indictment, Trial, Judgment and Punishment, according to Law.

SEC. 4. The Times, Places and Manner of holding Elections for *Senators and Representatives*, shall be prescribed in each State by the Legislature thereof; but the Congress may at time by Law make or alter such Regulations, except as to the Places of choosing Senators.

The Congress shall assemble at least once in every year, and such meeting shall be on the first Monday in December, unless they shall by Law appoint a different Day.

SEC. 5. Each House shall be the Judge of the Elections, Returns and Qualifications of its own Members, and a *Majority* of each shall constitute a Quorum to do business; but a smaller Number may adjourn from day to day, and may be authorized to compel the Attendance of absent Members, in such Manner, and under such Penalties as each House may provide.

Each House may determine the Rules of its Proceedings, punish its Members for disorderly Behavior, and, with the Concurrence of two-thirds, expel a Member.

Each House shall keep a Journal of its Proceedings, and from time to time publish the same, excepting such Parts as may in their Judgment require Secrecy; and the Yeas and Nays of the Members of either House on any question shall, at the Desire of one-fifth of those Present, be entered on the Journal.

Neither House, during the Session of Congress, shall, without the Consent of the other, adjourn for more than three days, nor to any other place than that in which the two Houses shall be sitting.

SEC. 6. The *Senators and Representatives* shall receive a Compensation for their Services, to be ascertained by Law, and *paid out of* the Treasury of the United States. They shall in all Cases, except Treason, Felony and Breach of the Peace, be privileged from Arrest during their attendance at the Session of their respective Houses, and in going to and returning from the same; and for any Speech or Debate in either House, they shall not be questioned in any other Place.

No Senator or Representative shall, during the time for which he was elected, be appointed to any civil Office under the Authority of the United States, which shall have been created, or the Emoluments whereof shall have been increased during such time; and no Person holding any Office under the United States shall be a Member of either House during his Continuance in Office.

SEC. 7. All Bills for raising Revenue shall originate in the House of Representatives; but the Senate may propose or concur with Amendments as on other Bills.

Every Bill which shall have passed the House of Representatives and the Senate, shall, before it becomes a Law, be presented to the President of the United States; if he approve he shall sign it, but if not he shall return it, with his Objections, to that House in which it shall have originated, who shall enter the Objections at large on their Journal, and proceed to reconsider it. If after such Reconsideration two-thirds of that House shall agree to pass the Bill, it shall be sent, together with the Objections, to the other House, by which it shall likewise be reconsidered, and if approved by two thirds of that House, it shall become a Law. But in all such Cases the Votes of both Houses shall be determined by Yeas and Nays, and the Names of the Persons *voting for and against* the Bill shall be entered on the Journal of each House respectively. If any Bill shall not be returned by the President within ten days (Sundays excepted) after it shall have been presented to him, the Same shall be a law, in like manner as if he had signed it, unless the Congress by their Adjournment prevent its Return, in which case it shall not be a Law.

Every Order, Resolution, or Vote to which the Concurrence of the *Senate and House of Representatives* may be necessary (except on a question of Adjournment) shall be presented to the President of the United States; and before the Same shall take Effect, shall be approved by him, or being disapproved by him, shall be repassed by two-thirds of the Senate and House of Representatives, according to the Rules and Limitations prescribed *in the Case* of a Bill.

SEC. 8. The Congress shall have Power:

To lay and collect Taxes, Duties, Imposts and Excises, to pay the Debts and provide for the common Defence and general Welfare of the United States; but all Duties, Imposts and Excises shall be uniform throughout the United States;

To borrow Money on the credit of the United States;

To regulate Commerce with foreign Nations, and among the several States, and with the Indian tribes;

To establish a uniform Rule of *Naturalization*, and uniform Laws on the subject of Bankruptcies throughout the United States;

To coin Money, regulate the Value thereof, and of foreign Coin, and fix the Standard of *Weights and Measures;*

To provide for the Punishment of counterfeiting the Securities and current Coin of the United States:

To establish Post offices and *post Roads;*

To promote the Progress of Science and useful Arts, by securing for limited Times to Authors and Inventors the Exclusive Right to their respective Writing and Discoveries;

To constitute Tribunals inferior to the Supreme Court;

To define and punish Piracies and Felonies committed on the high Seas, and Offences against *the Law of Nations;*

To declare War, grant Letters of Marque and Reprisal, and make Rules concerning Captures on Land and Water:

To raise and support Armies, but no Appropriation of Money to *that Use* shall be for a longer Term than two Years;

To provide and maintain a Navy;

To make Rules for the Government and Regulation of the land and naval Forces;

To provide for calling forth the Militia to execute the Laws of the Union, suppress Insurrections and repel Invasions;

To provide for organizing, arming, and disciplining the Militia, and for governing such Part of them as may be employed in the Service of the United States, reserving to the States respectively, the Appointment of the Officers, and the Authority of training the Militia according to the discipline prescribed by Congress;

To exercise exclusive Legislation in all Cases whatsoever, over such District (not exceeding ten miles square) as may, by Cession of particular States, and the Acceptance of Congress, become the Seat of the Government of the United States, and to exercise like Authority over all Places purchased by the Consent of the Legislature of the State in which the Same shall be, for the Erection of Forts, Magazines, Arsenals, dock-Yards, and other needful Buildings; and

To make all Laws which shall be necessary and proper for carrying into Execution the foregoing Powers, and all other Powers vested by this Constitution in the Government of the United States, or in any Department or any Officer thereof.

SEC. 9. The Migration or Importation of such Persons as any of the States now existing shall think proper to admit, shall not be prohibited by the Congress prior to the Year *one thousand eight hundred and eight*, but *a Tax* or duty may be imposed on such importation, not exceeding ten dollars for each Person.

The Privilege of the Writ *of Habeas Corpus* shall not be suspended, unless when in Cases of Rebellion or Invasion the public Safety may require it.

No Bill of Attainder or *ex post facto Law* shall be passed.

No Capitation, or other direct Tax shall be laid, unless in Proportion to the Census or Enumeration hereinbefore directed to be taken.

No Tax or Duty shall be laid on Articles exported from any State.

No Preference shall be given by any Regulation of Commerce or Revenue to the Ports of one State over those of another; nor shall Vessels bound to, or from, one State, be obliged to enter, clear, or pay Duties in another.

No Money shall be drawn from the Treasury, but in Consequence of Appropriations made by Law; and a regular Statement and Account of the Receipts and Expenditures of all public Money shall be published *from time to time.*

No Title of Nobility shall be granted by the United States; and no Person holding any Office of Profit or Trust under them, shall, without the Consent of the Congress, *accept of* any Present, Emolument, Office, or Title, of any kind whatever, from any King, Prince, or foreign State.

SEC. 10. No State shall *enter into* any Treaty, Alliance, or Confederation; grant Letters of Marque and Reprisal; coin Money; emit Bills of Credit; make any Thing but gold and silver Coin a Tender in Payment of Debts; pass any Bill of Attainder, ex post facto Law, or Law impairing the Obligation of Contracts, or grant any Title of Nobility;

No State shall, without the Consent of the Congress, lay any Imposts or Duties on Imports or Exports, except what may be absolutely necessary for executing its *inspection* Laws; and the net Produce of all Duties and Imposts, laid by any State on Imports or Exports, shall be for the Uses of the Treasury of the United States; and all such Laws shall be subject to the Revision and Control of the Congress.

No State shall, without the Consent of Congress, lay any Duty of Tonnage, keep Troops, or Ships of War in time of Peace, *enter into* any Agreement or Compact with another State, or with a foreign Power, or engage in War, unless actually invaded, or in such imminent Danger as will not admit of delay.

ARTICLE II.

SECTION 1. The executive Power shall be *vested in* a President of the United States of America. He shall hold his Office during the Term of four Years, and, together with the Vice-President chosen for the same Term, be elected, *as follows:*

Each State shall appoint, in such Manner as the Legislature thereof may direct, a Number of Electors, equal to the whole number of Senators and Representatives to which the State may *be entitled* in the Congress; but no Senator or Representative, or Person holding an Office of Trust or Profit under the United States, shall be appointed *an Elector.*

[The Electors shall meet in their respective States, and vote by Ballot for two Persons, of whom one at least shall not be *an Inhabitant* of the same State with themselves. And they shall make a List of all the Persons voted for, and of the Number of Votes for each; which List they shall sign and certify, and transmit sealed to the *Seat of the Government* of the United States, directed to the President of the Senate. The President of the Senate shall, in the Presence of the Senate and House of Representatives, open all the Certificates, and the Votes shall then be counted. The Person having the greatest Number of Votes shall be the President, if such Number be a Majority of the whole Number of Electors appointed; and if there be more than one who have such Majority, and have *an equal* Number of Votes, then the House of Representatives shall immediately choose by Ballot one of them for President; and if no Person have a Majority, then from the five highest on the List the said House shall in like Manner choose the President; but in choosing the President, the Votes shall be taken by States, the Representation from each State having one Vote: A quorum for this Purpose shall consist of a Member or Members from two thirds of the States, and a Majority of all the States shall be necessary to a Choice. In every Case, after the Choice of the President, the Person having the greatest Number of Votes of the Electors shall be the Vice-President. *But if* there should remain two or more who have equal Votes, the Senate shall choose from them by Ballot the *Vice-President.*]

The Congress may determine the Time of choosing the Electors, and the Day on which they shall give their Votes; which Day shall be the same throughout the United States.

No Person except a natural born Citizen, or a Citizen of the United States, at the time of the Adoption of this Constitution, shall be *eligible to* the Office of President; neither shall any Person be eligible to that Office who shall not have *attained to* the age of thirty-five Years, and been fourteen Years a Resident within the United States.

In Case of the Removal of the President from Office, or his Death, Resignation, or Inability to discharge the Powers and Duties of the said Office, the Same shall *devolve on* the Vice-President, and the Congress may by Law provide for the Case of Removal, Death, Resignation, or Inability both of the President and Vice President, declaring what Officer shall then act as President, and such Officer shall act accordingly, until the Disability be removed, or a President shall be elected.

The President shall, at stated Times, receive for his Services a Compensation, which shall be neither increased nor diminished during the Period for which he shall have been elected, and he shall not receive within that Period any other Emolument from the United States, or any of them.

Before he enter on the Execution of his Office, he shall take the following Oath or Affirmation:

"I do solemnly swear (or affirm) that I will faithfully execute the Office of President of the United States, and will to the best of my Ability, preserve, protect and defend the Constitution of the United States."

SEC. 2. The President shall be *Commander-in-Chief* of the Army and Navy of the United States, and of the Militia of the several States, when called into the actual Service of the United States; he may require the Opinion, in writing, of the principal Officer in each of the executive Departments, upon any Subject relating to the Duties of their respective Offices, and he shall have Power to grant Reprieves and Pardons for Offenses against the United States, except in Cases of Impeachment.

He shall have Power, by and with the Advice and Consent of the Senate, to make Treaties, provided two-thirds of the Senators present concur: and he shall nominate, and by and with the Advice and Consent of the Senate, shall appoint Ambassadors, other Public Ministers and Consuls, Judges of the Supreme Court, and all other Officers of the United States, whose Appointments are not herein otherwise provided for, and which shall be established by Law; but the Congress may by Law vest the Appointment of such Inferior Officers, as they may think proper, in the President alone, in the Courts of Law, or in the Heads of Departments.

The President shall have Power to fill up all Vacancies that may happen during the Recess of the Senate, by granting Commissions which shall expire at the End of their next Session.

SEC. 3. He shall from time to time give to the Congress Information of the State of the Union, and recommend to their Consideration such Measures as he shall judge necessary and expedient; he may, on extraordinary Occasions, convene both Houses, or either of them, and in Case of Disagreement between them, with Respect to the Time of Adjournment, he may adjourn them to such Time as he shall think proper; he shall receive Ambassadors and other public Ministers; he shall take Care that the Laws be faithfully executed, and shall Commission all officers of the United States.

SEC. 4. The President, Vice-President and all civil Officers of the United States, shall be removed from Office on Impeachment for, and Conviction of, Treason, Bribery, or other high Crimes and Misdemeanors.

ARTICLE III.

SEC. I. The judicial Power of the United States shall be vested in one Supreme Court, and in such inferior Courts as the Congress may from time to time ordain and establish. The Judges, both of the Supreme and Inferior Courts, shall hold their Offices during good Behavior, and shall, at stated Times, receive for their Services a Compensation, which shall not be diminished during their Continuance in Office.

SEC. 2. The judicial Power shall *extend to* all Cases in Law and Equity, arising under this Constitution, the Laws of the United States, and Treaties made, or which shall be made, under their Authority: to all Cases affecting Ambassadors, other public Ministers and Consuls; to all Cases of admiralty and maritime Jurisdiction; to Controversies to which the United States shall be a Party; to Controversies between two or more States; between a State and Citizens of another State; between Citizens of different States—between Citizens of the same State claiming Lands under Grants of different States, and between a State, or Citizens thereof and foreign States, Citizens or Subjects.

In all Cases affecting Ambassadors, other public Ministers and Consuls, and those *in which* a State shall be a Party, the Supreme Court shall have original Jurisdiction. In all the other Cases before mentioned, the Supreme Court shall have *appellate Jurisdiction*, both as to Law and Fact, with such Exceptions, and under such Regulations as the Congress shall make.

The Trial of all Crimes, except in Cases of Impeachment, shall be by Jury; and such Trial shall *be held* in the State where the said Crimes shall have been committed; but when not committed within any State, the Trial shall be at such Place or Places as the Congress may by Law have directed.

SEC. 3. Treason against the *United States*, shall consist only in levying War against them, or in adhering to their Enemies, giving them Aid and Comfort. No person shall be convicted of Treason unless on the Testimony of two Witnesses to the same overt Act, or on Confession in open Court.

The Congress shall have Power to declare the Punishment of Treason, but no Attainder of Treason shall work *Corruption of Blood*, or Forfeiture except during the Life of the Person attainted.

ARTICLE IV.

SECTION 1. Full Faith and Credit shall be given in each State to the public Acts, Records, and judicial Proceedings of every other State. And the Congress may by general Laws prescribe the Manner in which such Acts, Records and Proceedings shall be proved, and the Effect thereof.

SEC. 2. The Citizens of each State shall *be entitled* to all Privileges and Immunities of Citizens of the several States.

A Person charged in any State with Treason, Felony, or other Crime, who shall flee from Justice, and be found in another State, shall, on Demand of the executive Authority of the State from which he fled, be delivered up, to be removed to the State having Jurisdiction of the Crime.

No Person held *to service or labour* in one State, under the Laws thereof, escaping into another, shall, *in Consequence* of any Law or Regulation therein, be discharged from such *Service or Labour*, but shall be delivered up on Claim of the Party to whom such Service or Labour may be due.

SEC. 3. New States may be admitted by the Congress into this Union; but no new State shall be formed or erected within the Jurisdiction of any other State; nor any State be formed by the Junction of two or more States, or Parts of States, without the Consent of the Legislatures of the States concerned, as well as of the Congress.

The Congress shall have Power to dispose of and make all needful Rules and Regulations respecting the Territory or other Property belonging to the United States; and nothing in this Constitution shall be so construed as to Prejudice any claims of the United States, or of any particular State.

SEC. 4. The United States shall guarantee to every State in this Union a Republican Form of Government, and shall protect each of them against Invasion; and on Application of the Legislature or of the Executive (when the Legislature cannot be convened) against domestic Violence.

ARTICLE V.

The Congress, whenever two-thirds of both Houses shall deem it necessary, shall propose Amendments to this Constitution, or, on the Application of the Legislatures of the several States, shall call a Convention for proposing Amendments, which, in either Case, shall *be valid* to all Intents and Purposes, as Part of this Constitution, when ratified by the Legislatures of three-fourths of the several States, or by Conventions in three fourths thereof, as the one or the other Mode of Ratification may be proposed by the Congress; Provided that no Amendment which may be made *prior to* the Year One thousand eight hundred and eight shall in any Manner affect the first and fourth Clauses in the Ninth section of the first Article; and that no State, without its Consent, shall be deprived of its equal Suffrage in the Senate.

ARTICLE VI

All debts contracted and Engagements entered into, before the Adoption of this Constitution, shall be as *valid against* the United States under this Constitution, as under the Confederation.

This Constitution, and the Laws of the United States which shall be made in pursuance thereof; and all Treaties made, or which shall be made, under the Authority of the United States, shall be the supreme Law of the Land; and the Judges in every State shall be bound thereby, anything in the Constitution or Laws of any State to the Contrary notwithstanding.

The Senators and Representatives before mentioned, and the Members of the several State Legislatures, and all executive and judicial Officers, both of the United States and of the several States, shall be bound by Oath or Affirmation, to support this Constitution; but no religious Test shall ever be required as a qualification to any Office or public Trust under the United States.

ARTICLE VII.

The Ratifications of the Conventions of nine States shall be *sufficient for the Establishment of* this Constitution between the States so ratifying the Same

Done in Convention by the Unanimous Consent of the States present the Seventeenth Day of September, *in the Year of our Lord* one thousand seven hundred and Eighty-seven, and of the Independence of the *United States of America*, the Twelfth, *in witness* whereof We have hereunto subscribed our Names.

GEORGE WASHINGTON,
President and Deputy from Virginia.

*[This edition of the Constitution of the United States has been taken from the edition published by Joseph Bartlett Burleigh, LL. D., from his script imitation of the Constitution which was compared with the original in the Department of State, and also found to be correct in capitals, orthography, text, and punctuation. In every particular, as to capitals, orthography, text and punctuation, this edition follows Dr. Burleigh's.]

AMENDMENTS TO THE CONSTITUTION OF THE UNITED STATES.

[The following amendments were proposed at the first session of the first Congress of the United States, which was begun and held at the city of New York on the 4th of March, 1789, and were adopted by the requisite number of States. Laws of the U. S., vol. 1, page 82.]

[The following preamble and resolution preceded the original proposition of the amendments, and as they have been supposed by a high equity judge (8th Wendell's Reports, p. 100) to have an important bearing on the construction of those amendments, they are here inserted. They will be found in the Journals of the first Session of the first Congress.

CONGRESS OF THE UNITED STATES.

Begun and held at the city of New York, on Wednesday, the 4th day of March, 1789.

The conventions of a number of the States having, at the time of their adopting the Constitution, expressed a desire, in order to prevent misconstruction or abuse of its powers, that further declaratory and restrictive clauses should be added, and as extending the ground of public confidence in the government will best insure the beneficient ends of its institution:

Resolved, By the Senate and House of Representatives of the United States of America, in Congress assembled, two-thirds of both Houses concurring, that the following articles be proposed to the Legislatures of the several States, as amendments to the Constitution of the United States; all or any of which articles, when ratified by three-fourths of the said Legislatures, to be valid to all intents and purposes, as part of the said Constitution, namely:

ARTICLE I.

Congress shall make no law respecting an establishment of religion, or prohibiting the free exercise thereof; or abridging the freedom of speech or of the press, or the right of the people peaceably to assemble, and to petition the government for a redress of grievances.

ARTICLE II.

A well regulated militia being necessary to the security of a free State, the right of the people to keep and bear arms shall not be infringed.

ARTICLE III.

No soldier shall, in time of peace, be quartered in any house without the consent of the owner, nor in time of war, but in a manner to be prescribed by law.

ARTICLE IV.

The right of the people to be secure in their persons, houses, paper and effects, against unreasonable searches and seizures, shall not be violated; and no warrants shall issue but upon probable cause, supported by oath or affirmation, and particularly describing the place to be searched, and the person or things to be seized.

ARTICLE V.

No person shall be held to answer for a capital or otherwise infamous crime, unless on a presentment or indictment of a grand jury, except in cases arising in the land or naval forces, or in the militia, when in actual service in time of war or public danger; nor shall any person be subject for the same offense to be twice put in jeopardy of life or limb; nor shall be compelled in any criminal case, to be a witness against himself, nor be deprived of life, liberty or property, without due process of law; nor shall private property be taken for public use without just compensation.

ARTICLE VI.

In all criminal prosecutions, the accused shall enjoy the right to a speedy and public trial, by an impartial jury of the State and district wherein the crime shall have been committed, which district shall have been previously ascertained by law; and to be informed of the nature and cause of the accusation; to be confronted with the witnesses against him; to have compulsory process for obtaining witnesses in his favor, and to have the assistance of counsel for his defense.

ARTICLE VII.

In suits at common law, where the value in controversy shall exceed twenty dollars, the right of trial by jury shall be preserved; and no fact tried by a jury shall be otherwise re-examined in any court of the United States, than according to the rules of the common law.

ARTICLE VIII.

Excessive bail shall not be required, nor excessive fines imposed, nor cruel and unusual punishments inflicted.

ARTICLE IX.

The enumeration in the constitution of certain rights shall not be construed to deny or disparage others retained by the people.

ARTICLE X.

The powers not delegated to the United States by the Constitution, nor prohibited to it by the States, are reserved to the States respectively, or to the people.

[The following amendment was proposed at the second Session of the third Congress. It is printed in the Laws of the United States, vol. 1, p. 73, as article 11.]

ARTICLE XI.

The judicial power of the United States shall not be construed to extend to any suit in law or equity, commenced or prosecuted against one of the United States by citizens of another State, or by citizens or subjects of any foreign State.

[The three following sections were proposed as amendments at the first Session of the eighth Congress. They are printed in the Laws of the United States as article 12.]

ARTICLE XII.

1. The electors shall meet in their respective States, and vote by ballot for President and Vice-President, one of whom at least shall not be an inhabitant of the same State with themselves. They shall name in their ballots the person voted for as president, and in distinct ballots the person voted for as vice-president; and they shall make distinct lists of all persons voted for as president, and of all persons voted for as vice-president, and of the number of votes for each; which lists they shall sign and certify, and transmit sealed to the seat of the government of the United States, directed to the president of the Senate. The president of the Senate shall, in the presence of the Senate and House of Representatives, open all the certificates, and the votes shall then be counted. The person having the greatest number of votes for president shall be the president, if such number be a majority of the whole number of electors appointed; and if no person have such majority, then from the persons having the highest numbers, not exceeding three, on the list of those voted for as president, the House of Representatives shall choose immediately, by ballot, the president. But in choosing the president, the votes shall be taken by States, the representation from each State having one vote;

POLITICAL HISTORY OF THE UNITED STATES.

a quorum for this purpose shall consist of a member or members from two thirds of the States, and a majority of all the States shall be necessary to a choice. And if the House of Representatives shall not choose a president, whenever the right of choice shall devolve upon them, before the fourth day of March next following, then the vice-president shall act as president, as in the case of the death or other constitutional disability of the President.

2. The person having the greatest number of votes as vice-president shall be the vice-president, if such number be a majority of the whole number of electors appointed, and if no person have a majority, then from the two highest numbers on the list the senate shall choose the vice president. A quorum for the purpose shall consist of two thirds of the whole number of senators, and a majority of the whole number shall be necessary to a choice.

3. But no person constitutionally ineligible to the office of president shall be eligible to that of vice-president of the United States.

ARTICLE XIII.

Sec. 1. Neither slavery nor involuntary servitude, except as a punishment for crime, whereof the party shall have been duly convicted, shall exist within the United States, or any place subject to their jurisdiction.

Sec. 2. Congress shall have power to enforce this article by appropriate legislation.

ARTICLE XIV.

Sec, 1. All persons born or naturalized in the United States, and subject to the jurisdiction thereof, are citizens of the United States and of the State wherein they reside. No State shall make or enforce any law which shall abridge the privileges or immunities of citizens of the United States; nor shall any State deprive any person of life, liberty, or property, without due process of law, nor deny to any person within its jurisdiction the equal protection of the laws.

Sec. 2. Representatives shall be apportioned among the several States according to their respective numbers, counting the whole number of persons in each State, excluding Indians not taxed. But when the right to vote at any election for the choice of electors for President and Vice President of the United States, representatives in Congress, the executive or judicial officers of a State, or the members of the Legislature thereof, is denied to any of the male inhabitants of such State, being twenty-one years of age, and citizens of the United States, or in any way abridged, except for participation in rebellion or other crime, the basis of representation shall therein be reduced to the proportion which the number of such male citizens shall bear to the whole number of male citizens twenty-one years of age in such State.

Sec. 3. No person shall be a Senator or Representative in Congress, or elector of President or Vice-President, or hold any office, civil or military, under the United States, or under any State, who, having previously taken an oath as a member of Congress, or as an officer of the United States, or as a member of any State Legislature, or as an executive or a judicial officer of any State, to support the Constitution of the United States, shall have engaged in insurrection or rebellion against the same, or given aid or comfort to the enemies thereof. But Congress may, by a vote of two-thirds of each House, remove such disability.

Sec. 4. The validity of the public debt of the United States, authorized by law, including debts incurred for payment of pensions and bounties for services in suppressing insurrection or rebellion, shall not be questioned. But neither the United States nor any State shall assume or pay any debt or obligation occurred in aid of insurrection or rebellion against the United States, or any claim for the loss or emancipation of any slave; but all such debts, obligations and claims shall be held illegal and void.

Sec. 4. Congress shall have the power to enforce, by appropriate legislation, the provisions of this article.

ARTICLE XV.

Sec. 1. The right of the citizens of the United States to vote shall not be denied or abridged by the United States, or by any State, on account of race, color or previous condition of servitude.

Sec. 2. The Congress shall have power to enforce this article by appropriate legislation.

The National Government.—The Constitution was ratified by the States, as follows: Delaware, December 7, Pennsylvania, December 12, New Jersey, December 18, of that year; Georgia, January 2, Connecticut, January 9, Massachusetts, February 6, Maryland, April 28, South Carolina, May 23, New Hampshire (the ninth State), June 21, Virginia, June 26, New York, July 26, 1788, North Carolina, November 25, 1789, and Rhode Island, May 29, 1790.

September 18, 1788, Congress appointed the first Wednesday in January, 1789, for the choosing of presidential electors, the first Wednesday in February for casting the ballots for president and vice-president, and the first Wednesday in March "for commencing proceedings under the Constitution," but owing to delays in coming together, the first Congress did not have a quorum until April 6, and the president was not inaugurated until April 30, 1789.

The division of parties, based on their relations to the new Constitution, began to prevail. During the debates in the Federal Convention and in the several State conventions which were called for its adoption, those who favored it were called Federalists, while those who opposed it were from that circumstance known as Anti-federalists.

The United States was, during the Revolutionary war and the period of Confederation, without an executive head in distinction from a legislative body. The Continental Congress exercising all the political functions of a national character. The President of that body was its presiding officer, and nothing more.

The National Conventions for the nomination of candidates for President and Vice-President are of comparatively recent origin. In the earlier political history of the United States, under the Federal Constitution, candidates for President and Vice-President were nominated by congressional and legislative caucuses. Washington was elected as first President under the Constitution, and re-elected for a second term by a unanimous or nearly unanimous concurrence of the American people; but an opposition party gradually grew up in Congress, which became formidable during its second term, and which ultimately crystalized into what was then called the Republican party. John Adams, of Massachusetts, was prominent among the leading Federalists, while Thomas Jefferson, of Virginia, was pre-eminently the author and oracle of the Republican party, and, by common consent, they were the opposing candidates for the Presidency, on Washington's retirement in 1796–7.

Eleven States took part in the first Presidential election. North Carolina and Rhode Island had not ratified the Constitution, and took no part in the election. Fifteen States took part in the second election, Vermont and Kentucky having been admitted as States.

1797. Washington having refused a third term, John Adams, Thomas Jefferson, Thomas Pinckney, and Aaron Burr were candidates in 1796. Sixteen States voted; Tennessee, admitted in 1796, as the sixteenth State. As the Constitution then stood, the second choice of the people became Vice-President. Adams received 71 and Jefferson 68 electoral votes. The existence of two well defined political parties was manifest. Washington was not a partisan, but leaned toward Federalism, or a strong central government. John Adams, Pinckney and Alexander Hamilton were the leaders of the Federalists; Thomas Jefferson and Aaron Burr were the leaders of the Republicans, or States rights party.

1801. The first Congressional caucus to nominate candidates for President and Vice-President, is said to have been held in Philadelphia, in the year 1800, and to have nominated Mr. Jefferson for the first office and Aaron Burr for the second. John Adams and C. C. Pinckney were the nominees of the Federalists. Jefferson and Burr each received 73 votes, Adams 64, Pinckney 63. There was thus a tie and a tangle that threatened serious consequences. The election was transferred to the lower House of Congress. After a desperate struggle of seven days, that body chose Jefferson President and Burr Vice-President.

Before another election was held, the Constitution was so amended that the electors have since voted directly for presidents and vice-presidents. With that defeat Adams and his party went out of power forever. It continued to exist and vainly strive for the ascendancy until after the war of 1812, when, with the election of Monroe, it ceased to exist.

1805. In 1804, Mr. Jefferson was re-elected President, with George Clinton, of New York, for Vice, encountering but slight opposition; Messrs. Charles C. Pinckney and Rufus King, the opposing candidates, receiving only 14 out of 176 electoral votes.

There is no public record as to the manner of the nominations of Presidential candidates in 1804. Following the example of Washington, Jefferson retired to public life at the close of his second term. James Madison, of Virginia, came to the front as the leader of the Republican forces, with Clinton still second.

1809. In January, 1808, when Mr. Jefferson's second term was about to close, a Republican Congressional Caucus was held at Washington to decide as to the relative claims of Madison and Monroe for the succession, the Legislature of Virginia, which had been said to exert a potent influence over such questions, being, on this occasion, unable to agree as to which of her favored sons should have the preference. Ninety-four out of the 136 Republican members of Congress attended this caucus, and declared their preference of Mr. Madison, who received 83 votes, the remaining 11 votes being divided between Mr. Monroe and George Clinton. The opposition supported Mr. Pinckney, but Mr. Madison was elected by a large majority. George Clinton, of New York, candidate of a section of the Republican party, secured six of the nineteen electoral votes of his own State.

1813. Toward the close of Mr. Madison's earlier term he was nominated for re-election by a Congressional Caucus, held at Washington in May, 1812. In September of the same year, a convention of the opposition, composed of Federalists and dissatisfied Republicans, representing eleven States, was held in the city of New York, which nominated De Witt Clinton, of New York, for President. He was also put in nomination by the Republican Legislature of New York. The ensuing canvass resulted in the re-election of Mr. Madison, who received 128 electoral votes to 89 for De Witt Clinton. The second war with England was fought during the seventh administration.

Federal Platform, *abridged:* 1. Opposition to the Congressional Caucus system of nomination of Presidential candidates; 2, to an official regency self-constituted to prescribe tenets of political faith and tests of political orthodoxy; 3, to a monopoly of the highest offices by particular States, and especially to the continuance of Virginia in the Presidency; 4, to the continuance of Mr. Madison in an office which, in view of our pending difficulties with Great Britain, requires an incumbent of greater decision, energy and efficiency; 5, to the lingering inadequacy of preparation for the war; 6, averment of the existing necessity of placing the country in a condition for aggressive action for the conquest of Canada.

1817-21. In 1816, the Republican Congressional Caucus nominated James Monroe, who received 65 votes, to 54 for William H. Crawford, of Georgia. The opposition, or Federalists, named Rufus King, of New York, who received only 34 electoral votes out of 217. There was no opposition to the re-election of Mr. Monroe in 1820, a single (Republican) vote being cast against him, and for John Quincy Adams.

Monroe Doctrine. The policy of non-intervention in European affairs not directly involving American interests is called the Monroe Doctrine. It should rather be called the Washington Doctrine, maintained by him when Jefferson favored open and practical sympathy with the French Revolutionists. It is known as the Monroe Doctrine because in 1822, while James Monroe was President, the Spanish-American colonists were promptly recognized in their uprising for independency of Spain. The doctrine then received a somewhat enlarged meaning, and came to mean, partly, that Europe must not interfere with American affairs. This feature of the doctrine received special emphasis in the expulsion of Maximilian from Mexico, soon after the Southern Confederacy had been overthrown.

1825. In 1824, the Republican party could not be induced to abide by the decision of a Congressional Caucus. A large majority of the Republican members formally refused to participate in such a gathering, or be governed by its decision; still a caucus was called, and attended by the friends of Mr. Crawford alone. Of the 261 members of Congress at this time, 216 were Democrats or Republicans; yet only 66 responded to their names at roll call, 64 of whom voted for Mr. Crawford as the Republican nominee for President. This nomination was very extensively repudiated throughout the country, and three competing Republican candidates were brought into the field through legislative and other machinery, viz: Andrew Jackson, Henry Clay and John Quincy Adams. The result of this famous "scrub" race for the Presidency, was tha no one was elected by the people, General Jackson receiving 99 electoral votes, Mr. Adams 84, Mr. Crawford 41, and Mr. Clay 37. The election then devolved upon the House of Representatives, when Mr. Adams was chosen, receiving the votes of 13 States, against 7 for Gen. Jackson, and 4 for Mr. Crawford. This was the end of "King Caucus."

1829. Gen. Jackson was immediately thereafter put in nomination for the ensuing term by the Legislature of Tennessee, having only Mr. Adams for an opponent in 1828, when he was elected by a decided majority, Mr. Jackson receiving 178 electoral votes, to 83 for Mr. Adams.

1833. The first political National Convention in this country of which we have any record was held in Philadelphia in September, 1830, styled the United States Anti-Masonic Convention. It was composed of 96 delegates. Francis Granger, of New York, presided, but no business was transacted.

In compliance with its call, a National Anti-Masonic Convention was held at Baltimore in September, 1831, which nominated Wm. Wirt, of Maryland, for President, and Amos Ellmaker, of Pennsylvania, for Vice-President. The candidates accepted the nomination, and received the electoral votes of Vermont only. The Anti-Masonic Party owed its origin to the forcible abduction and alleged exposure of Masonry in 1826, and to the assumption that Masons hold their obligations to the State and justice subordinate to their duties to the order and its members.

There was no open opposition in the Democratic Party to the nomination of Gen. Jackson for a second term in 1832, but the party was not so well satisfied with Mr. Calhoun, the Vice-President, so a convention was called to meet in Baltimore, in May, 1832, to nominate a candidate for the second office. Mr. Van Buren received more than two-thirds of all the votes cast, and was declared nominated.

The National Republicans met in convention at Baltimore, December 12, 1831. Seventeen States and the District of Columbia were represented by 157 delegates, who cast a unanimous vote for Henry Clay, of Kentucky, for President.

Anti-Slavery and Abolitionist Party. There never was a time when all Americans acquiesced in slavery. The Society of Friends, the original English settlers of Pennsylvania, opposed it, and so from time to time did others; but the acrimonious contest over slavery, out of which grew the term Abolition and its derivatives, dates from 1829, when William Lloyd Garrison began the severe arraignment of slaveholders as criminals. In 1831 he started his paper, the *Liberator*. The next year a society was formed in Boston for the purpose of promoting the cause of emancipation. That was the New England Anti-Slavery Society. The American Anti-Slavery Society was formed at Philadelphia in 1833, Beriah Green, President, and John G. Whittier one of the secretaries. Their number was small, but in 1840 they divided into two wings, one favoring abolition within the Union, the other denouncing the Constitution as a bulwork of slavery. Wendell Phillips, the chief orator of the cause, was especially virulent in denunciation of the Constitution. The cause of anti-slavery grew much more rapidly than the party which was its highest embodiment. There was never any very large number of American citizens who were, prior to the civil war, avowed abolitionists. Gradually the principle of emancipation gained ground, however. At the South, and largely in Democratic circles North, the Republicans were called Abolitionists, often with the epithet black prefixed. After the war, a majority of the Northern people took pride in claiming to have been Abolitionists. In 1844, when the Abolitionists polled 62,300 presidential votes, the Whigs attributed the defeat of Clay by Polk to the defection of anti-slavery Whigs. The ticket then was Birney and Morris. In operating the underground railroad, the Abolitionists took the lead, as they did in all anti-slavery movements. Their first martyr was Elijah P. Lovejoy, of Alton, Ill., who was killed by a mob in 1839. John Brown was the most famous of the list. John Quincy Adams, Joshua R. Giddings, John P. Hale, Salmon P. Chase and Charles Sumner were conspicuous in Congress for boldly avowing Abolitionism before the formation of the Republican party. It was not until emancipation had become an accomplished fact that the party finally disbanded. The Colonizationists, who wanted to do away with slavery by returning the negroes to Africa, were bitterly hostile to the Abolition movement. They never went into politics.

1837. In May, 1835, a Democrat National Convention, representing twenty-one States, assembled at Baltimore. A rule was adopted that two-thirds of the whole number of votes should be necessary to make a nomination, or to decide any question connected therewith. On the first ballot for President Mr. Van Buren was nominated unanimously, receiving 265 votes.

In 1835, Gen. William H. Harrison was nominated for President, with Francis Granger for Vice-President, by a Whig State Convention at Harrisburg, Pa. Gen. Harrison also received nomination in Maryland, New York, Ohio and other States.

A Whig National Convention, representing twenty-one States, met at Harrisburg, Pa., December 4, 1839. James Barbour, of Virginia, presided, and the result of the first ballot was the nomination of Gen. William H. Harrison, of Ohio, who received 148 votes to 90 for Henry Clay, and 16 for Gen. Winfield Scott. John Tyler, of Virginia, was unanimously nominated as the Whig candidate for Vice-President.

1841. A Convention of Abolitionists was held at Warsaw, N. Y., on the 13th of November, 1839, and nominated for President James G. Birney, of New York, and for Vice-President, Francis J. Lemoyne, of Pennsylvania. These gentlemen declined the nomination. Nevertheless they received a total of 7,609 votes in various Free States.

A Democratic National Convention met at Baltimore, May 5, 1840, to nominate candidates for President and Vice-President. The Convention then unanimously nominated Mr. Van Buren for re-election as President, and Richard M. Johnson for Vice-President.

The importance of political organization was now so well established that in 1840 the opposition, which had gradually come to be known as Whigs, held a National Convention. In the meanwhile the panic and hard times of 1837 had occurred. The Whigs chose as their candidates Gen. Harrison and John Tyler of Virginia. The campaign was very exciting. It resulted in a brilliant Whig victory. Out of 294 votes cast, Harrison and Tyler received 224. Harrison died almost immediately, and April 6 John Tyler became acting President. That was the first time in the history of the country that the Angel of Death elected the President.

1845. A Whig National Convention assembled in Baltimore on the 1st of May, 1844, at which every State in the Union was represented, and Mr. Clay was nominated for President by acclamation, with Theodore Frelinghuysen for Vice-President.

A Democratic National Convention assembled at Baltimore on the 27th of May, 1844, adopted the two-thirds rule, and, after a stormy session of three days, James K. Polk, of Tennessee, was nominated for President, and Silas Wright, of New York, for Vice-President. Mr Wright declined the nomination, and George M. Dallas, of Pennsylvania, was selected.

The Liberty Party National Convention met at Buffalo on the 30th of August, 1843. James G. Birney, of Michigan, was unanimously nominated for President, with Thomas Morris, of Ohio, for Vice-President.

The Liberty Party comprised that portion of the American Anti-Slavery Society which believed in using political instrumentalities under the Constitution for the futherance of their views, and a considerable number of anti-slavery men outside the society. In 1840 its candidate got of the popular vote 7,059; in 1844, 62,300—no electoral vote. The more ultra wing of the Anti-Slavery Society, which condemned not only slavery, but the Constitution, as accessary, were the Abolitionists proper. See Anti-Slavery Party, 1833.

Before the next election the Mexican war had been fought and gold discovered in California.

1849. A Whig National Convention met at Philadelphia on the 7th of June, 1848. After a rather stormy session of three days, Gen. Zachary Taylor, of Louisiana, was nominated for President, and Millard Fillmore, of New York, for Vice-President.

The Democratic Notional Convention for 1848 assembled in Baltimore on the 22d of May. The two-thirds rule was adopted, and Gen. Lewis Cass was nominated for President on the fourth ballot.

On the 9th of August, 1848, a free Democratic or Free Soil Convention was held at Buffalo, which was attended by delegates from seventeen States. Charles Francis Adams, of Massachusetts, presided, and the Convention nominated Messrs. Van Buren and Adams as candidates for President and Vice-President.

The Free Soil Party of 1848 asserted that the other existing parties had sold out to slave power. Federal government must be rescued from its control; freedom is National, slavery is sectional, and exists by State law only; no more slave States, and no slave territory; public lands for settlers; cheap postage; cheap government; internal improvements of National concern; payment of National debt; a revenue tariff; "Free soil, free speech, free labor, and free men."

The Ultra Free Soil of 1848, dissatisfied with the platform of the Free Soil party, nominated Gerritt Smith for President, and announced as their platform the right and duty of the General Government to abolish slavery in the States.

"Old Rough and Ready" was the popular name for Taylor, and he swept the country, aided by the fact that Van Buren, out of hatred for Cass, ran as a Free Soil candidate, drawing off votes enough in New York to give Taylor that State.

1853. The Whig National Convention of 1852 assembled at Baltimore on the 16th of June, and after an exciting session of six days, nominated Gen. Winfield Scott as President, on the fifty third ballot.

The Democratic Convention of 1852 assembled at Baltimore on the 1st of June, and the two-thirds rule was adopted. Gen. Franklin Pierce, of New Hamshire, was nominated for President on the forty-ninth ballot.

The Free Soil Democracy held a National Convention at Pittsburg on the 11th of August, 1852, Henry Wilson, of Massachusetts, presiding. All the Free States were represented, with Delaware, Virginia, Kentucky and Maryland. John P. Hale, of New Hampshire, was nominated for President, with George W. Julian, of Indiana, for Vice-President. Its platform was the same as in 1848. Hale received 156,149 votes.

Both of the leading parties eagerly disavowed anti-slavery sentiments and vied with each other in subserviency to the South. The Democratic ticket was elected, receiving 254 out of the 296 electoral votes.

1857. The Republican National Convention of 1856 met at Philadelphia, June 17. Col. John C. Fremont was unanimously nominated, having received 359 votes on the first ballot, against 196 for John McLean.

On February 22d, 1856, the American National Nominating Convention organized at Philadelphia, with 227 delegates in attendance. Millard Fillmore was declared to be the nominee, with Andrew Jackson Donelson, of Tennessee, for Vice-President.

The Democratic National Convention of 1856 met at Cincinnati on the 2d of June, and nominated James Buchanan on the seventeenth ballot. John C. Breckenridge, of Kentucky, was unanimously nominated for Vice-President.

The Republican Platform, condensed: ". . . . Opposed to the repeal of the Missouri Compromise. . . *Resolved*, That the principles promulgated in the Declaration of Independence, and embodied in the Federal Constitution, are essential to the preservation of our republican institutions, and that the Federal Constitution, the rights of the States, and the union of the States shall be preserved. Denied the authority of Congress, of a Territorial legislature, of any individual or association of individuals, to give legal existence to slavery in any Territory in the United States, while the present Constitution is maintained. That the Constitution confers upon Congress the sovereign power over the Territories of the United States for their government, and that in the exercise of this power it is both the right and the imperative duty of Congress to prohibit in the Territories those twin relics of barbarism—polygamy and slavery. That the dearest constitutional rights of the people of Kansas have been fraudulently and violently taken from them; that for this high crime against the Constitution, the Union and humanity, we arraign the administration, the President, his advisers, before the country and before the world. That Kansas should be immediately admitted as a State of the Union with her present free constitution. That the Ostend circular was in every respect unworthy of American diplomacy. That a railroad to the Pacific is imperatively demanded, and that the Federal Government ought to render immediate and efficient aid. That the improvement of rivers and harbors of a national character is authorized by the Constitution. That we invite the affiliation and co-operation of the men of all parties; as the spirit of our institutions, as well as the constitution of our country, guarantees liberty of conscience and equality of rights among citizens, we oppose all prospective legislation affecting their security.

The more radical wing of the Whig party in the North, and the Free Soil party, with fresh accessions from the anti-slavery Democrats, may be regarded as the chief components of the Republican party, organized under that name in February, 1854.

American (Know-Nothing) Platform: Dependence on God. The perpetuation of the Federal Union, the bulwark of American independence. Americans must rule America. No person shall be selected for political station who recognizes any allegiance to any foreign power. Unqualified recognition and maintenance of the reserved rights of the several States, and non-interference of Congress. Citizens of the United States, permanently residing in any Territory thereof, to frame their constitution and laws. No State or Territory ought to admit others than citizens of the United States to their right of suffrage, or of holding political office. A continued residence of twenty-one years an indispensible requisite for citizenship hereafter. Opposition to any union between Church and State; no interference with religious faith or worship; no test oaths for office; a strict economy in public expenditures; enforcement of all laws constitutionally enacted until said laws shall have been repealed, or shall be declared null and void.

The Democratic Platform substantially reiterated former documents of the same kind.

1861. A Republican National Convention assembled at Chicago on May 16, 1860, delegates being in attendance from all the Free States, as also from Delaware, Maryland Virginia, Kentucky and Missouri. Abraham Lincoln was nominated for the Presidency on the third ballot, receiving 354 out of 466 votes; his principal competitors being William H. Seward, Salmon P. Chase, and Edward Bates.

A Democratic National Convention assembled at Charleston, S. C, on the 23d of April, 1860, with full delegates present from every State. Dissensions arising, chiefly out of questions of slavery in the Territories, too great to be reconciled, the delegations from seven Southern States withdrew, and the convention adjourned, after fifty-seven ineffectual ballots for a candidate, to meet at Baltimore, June 18. Here Stephen A. Douglas was nominated for President, and B. Fitzpatrick for Vice-President. The latter declined, and H. V. Johnson was substituted by the National Committee. The convention of Seceders nominated John C. Breckenridge for President and Joseph Lane for Vice-President.

A "Constitutional Union" or American Convention from twenty States met at Baltimore, May 9, 1860, and nominated John Bell and Edward Everett for the Presidency and Vice-Presidency.

The contest was fierce and close. The popular vote of the two wings of the Democracy were several hundred thousand in excess of the Republican vote, but being divided, the result was that Lincoln had 180 votes, Douglas 12, Breckenridge 72, and Bell 39. Douglas had substantially the same popular vote as Breckenridge and Bell combined.

The Democratic Party represented by Breckenridge adopted the resolutions of 1856, with these additions:

1. The right to take slaves into the United States Territories. 2. The United States to protect such property there. 3. A Territory is entitled to admission as a State, when ready, with or without slavery, as its people choose. 4. Acquisition of Cuba, honorably. 5. States obstructing Fugitive Slave Law, revolutionary. 6. Naturalized citizens to be protected abroad. 7. Favors Pacific railroad.

The Republican Party platform:

1. Justified the new party by Buchanan's acts. 2. Federal Constitution, rights and Union of States shall be preserved. 3. Reprobates disunion. 4. State control of State affairs. 5. Arraigns slaveholders' administration. 6. Charges extravagance, and plunder of treasury. 7. Denies that the Constitution carries slavery into Territories. 8. No right in any persons to legalize it in them. 9. Calls for suppression of slave trade. 10. Finds fraud in "Kansas Nebraska Act." 11. Demands admission of Kansas as a free State. 12. Tariff should encourage national industries. 13. Favors homestead laws. 14. No change in naturalization laws. 15. Asserts right of Congress to vote money for national improvements. 16. Claims United States aid for Pacific railroad.

The platform of the Douglas wing of the Democratic party was substantially that of the Breckenridge wing except that the slavery question ought to be referred to the Supreme Court of the United States for settlement.

1865. The Republican National Convention met at Baltimore, June 7. The renomination, for President, of Abraham Lincoln, of Illinois, was made unanimous, he having received the votes of all the States except Missouri, cast for Gen. Grant. For Vice-President, Andrew Johnson, of Tennessee, was nominated on the second ballot, his principal competitors being D. S. Dickinson and H. Hamlin.

The Democratic National Convention met at Chicago, Ill., August 29. Nominations—President, George B. McClellan, of New Jersey; Vice-President, George H. Pendleton, of Ohio.

The twentieth election occurred during the civil war, and was the triumph of the war party at the North. The vote stood, Lincoln, 212; McClellan, 21. In little over a month after his second inauguration Mr. Lincoln was assassinated, and Andrew Johnson came to the Presidency in his place. Johnson became so very unpopular that he was finally impeached, and only by one vote escaped conviction. Had he been convicted, B. F. Wade of Ohio would have filled out the balance of the the second Lincoln term.

The Republican Platform.—*Resolved*, That it is the duty of every American citizen to maintain, against all their enemies, the integrity of the Union and the paramount authority of the Constitution, and we pledge ourselves to do everything in our power to aid the government in quelling, by force of arms, the Rebellion now raging against its authority, and in bringing to the punishment due their crimes the rebels and traitors arrayed against it. We approve the determination of the government not to compromise with rebels, nor to offer them any terms of peace, except such as may be based upon an "unconditional surrender" of their hostility, and to prosecute the war with the utmost possible vigor to the complete suppression of the Rebellion. As slavery was the cause, and now constitutes the strength of this Rebellion, we uphold and maintain the acts and proclamations by which the government, in its own defense, has aimed a death-blow at the gigantic evil. That the thanks of the American people are due to the soldiers and sailors; that the nation owes to them some permanent recognition; that we approve and applaud the practical wisdom with which Abraham Lincoln has discharged, under circumstances of unparalleled difficulty, the great duties and responsibilities of the presidential office. We deem it essential to the general welfare that harmony should prevail in the national councils, and we regard as worthy of public confidence and official trust, those only who cordially indorse the principles proclaimed in these resolutions. The government owes to all men employed in its armies, without regard to distinction of color, the full protection of the laws of war. That foreign immigration should be fostered and encouraged by a liberal and just policy. That we are in favor of the speedy construction of the railroad to the Pacific coast. That the national faith, pledged for the redemption of the public debt, must be kept inviolate. That we approve the position taken by the government, that the people of the United States can never regard with any indifference the attempt of any European power to overthrow by force, or to supplant by fraud, the institutions of any Republican government on the Western continent.

The Democratic Party of 1864, in National convention, adopted the following Party Platform:

"*Resolved*, That in the future, as in the past, we will adhere with unswerving fidelity to the Union under the Constitution. That after four years of failure to restore the Union by the experiment of war, during which, under the pretense of a military necessity of a war power higher than the Constitution, the Constitution itself has been disregarded in every part; justice, humanity, liberty and the public welfare demand that immediate efforts be made for a cessation of hostilities, with a view to an ultimate convention of all the States; that peace may be restored on the basis of the Federal Union of all the States. That the direct interference of the military authority in the recent elections was a shameful violation of the Constitution; and the repetition of such acts will be held as revolutionary, and resisted. That the aim and object of the Democratic party is to preserve the Federal Union and the rights of the States unimpaired; and they hereby declare that they consider the administrative usurpations of extraordinary and dangerous powers not granted by the Constitution, as calculated to prevent a restoration of the Union. That the shameful disregard of the administration to its duty to our fellow citizens, prisoners of war, deserves the severest reprobation. That the sympathy of the Democratic party is heartily and earnestly extended to the soldiery and the sailors.

John C. Fremont was nominated by the Radicals and withdrew and recommended the support of the regular Republican ticket, which recommendation was followed.

Eleven States with an electoral vote of 81, had seceded and established an independent government, under the name of The Confederate States of America.

The Right of Secession formally assumed December 20, 1860: "We, the people of South Carolina, in convention assembled, do declare and ordain that South Carolina, in the exercise of her sovereign will as an independent State, acceded to the Federal Union [May 23, 1788], and that, in the exercise of the same sovereign will, it is her right to secede from the said Federal Union."

The other seceding States took the same ground.

"Our new government," said Alex. H. Stephens, March 11, 1861, is founded exactly upon the opposite idea [to the equality of races]; its foundations are laid, its corner-stone rests upon the great truth that the negro is not equal to the white man; that slavery—subordination to the superior race—is his natural and normal condition. The negro, by nature, or by the curse against Canaan, is fitted for that condition which he occupies in our system, and by experience we know that it is best, not only for the superior but for the inferior race, that it should be so. It is, indeed, in conformity with the ordinance of the Creator.

1869. The Republican National Convention met at Chicago, Ill., May 20th. Nominations—President, Ulysses S. Grant, of Illinois: Vice-President, Schuyler Colfax, of Indiana.

The Democratic National Convention met at New York, July 4th. Nominations—President, Horatio Seymour, of New York; Vice-President, Francis P. Blair of Missouri.

Three states, Virginia, Texas and Mississippi, had not been restored to the Union, and took no part in the election. Grant received 214 votes; Seymour, 80, Grant's popular majority was about half a million.

Republican Convention.—"We congratulate the country on the assured success of the Reconstruction policy of Congress, as evidenced by the adoption, in the majority of the States lately in rebellion, of constitutions securing equal, civil and political rights to all. The guarantee by Congress of equal suffrage to all loyal men of the South was demanded by every consideration of public safety, of gratitude, and of justice, and must be maintained. We denounce all forms of repudiation as a national crime. It is due to the labor of the nation that taxation should be equalized and reduced as rapidly as the national faith will permit. The national debt, contracted as it has been for the preservation of the Union for all time to come, should be extended over a fair period for redemption. The best policy to diminish our burden of debts is to so improve our credit that capitalists will seek to loan us money at lower rates of interest than we now pay, so long as repudiation, partly or total, open or covert, is threatened or suspected. The government should be administered with the strictest economy. We profoundly deplore the tragic death of Abraham Lincoln, and regret the accession to the presidency of Andrew Johnson. No citizen must be liable to arrest and imprisonment by any foreign power for acts done or words spoken in this country. The bounties and pensions provided by the laws for the brave defenders of the nation are obligations never to be forgotten. Foreign immigration should be fostered and encouraged by a liberal and just policy. This convention declares itself in sympathy with all oppressed people who are struggling for their rights. We favor the removal of the disqualifications and restrictions imposed upon the late rebels, in the same measure as the spirit of disloyalty shall die out, and as may be consistent with the safety of the loyal people. That we recognize the great principles laid down in the immortal Declaration of Independence as the true foundation of democratic government; and we hail with gladness every effort toward making these principles a living reality on every inch of American soil.

Democratic Platform.—Demanded immediate restoration of all the States to their rights in the Union under the Constitution, and of civil government to the American people. Amnesty for all past political offences. Payment of all the public debt as rapidly as practicable. Equal taxation, including government bonds. One currency for the government and the people, the producer and the bondholder. Economy in the administration; reduction of the standing army and navy; the abolition of the Freedman's Bureau. A tariff for revenue. Such equal taxation as will afford incidental protection to domestic manufactures. Reform of abuses. Exual rights of protection for naturalized and native born citizens at home and abroad. We arraign the radical party for its disregard of right and the unparalleled oppression and tyranny which have marked its career. Denounces construction acts of Congress as usurpations and unconstitutional, revolutionary and void. The public lands should be distributed as widely as possible among the people, to none but actual occupants."

POLITICAL HISTORY OF THE UNITED STATES.

1873. By 1872 a great deal of disaffection had developed within the Republican party, owing to the long continuance in power. The discontent found expression in the assembling of the National Liberal Republican Convention at Cincinnati, Ohio, May 1st. Nominations—President, Horace Greeley, of New York, on the sixth ballot, by 482 votes, against 187 for David Davis, of Illinois; Vice-President, B. Gratz Brown, of Missouri, on the second ballot.

The Republican National convention met at Philadelphia, Pa., June 5th. Nominations—Ulysses S. Grant, on the first ballot, unanimously; Vice-President, Henry Wilson, of Massachusetts, receiving 364½ votes, against 321½ for Schuyler Colfax.

The Democratic National Convention met at Baltimore, Maryland, July 9th, and put the Liberal Republican ticket in the field. Nominations—President, Horace Greeley, on the first ballot, receiving 686 votes to 38 scattering; Vice-President, B. Gratz Brown, who received 713 votes.

The Democratic ("Straight Out") Convention met at Louisville, Ky., September 3d. Nominations—President, Charles O'Connor, of New York; Vice-President, John Q. Adams, of Massachusetts. The nominations were declined.

In the election of 1872, the apportionment act—ratio, 1 to 131,425—based on the census of 1870, raised the membership of the House to 292, and made the total electoral vote 366. The Republicans carried 286 electoral votes, and the opposition only 47. Six States—Georgia, Kentucky, Maryland, Missouri, Tennessee, and Texas having 66 electoral votes, elected Greeley electors, but Mr. Greeley dying Nov. 29, only three were cast for him, and of the remainder, 42 were cast for Thomas A. Hendricks, of Indiana, 18 for B. Gratz Brown, of Missouri, 2 for Chas. J. Jenkins, of Georgia, and one for David Davis, of Illinois. From Arkansas and Louisiana; two sets of electors obtained contested certificates. The former was entitled to 6 and the latter to 8 electoral votes. These 14 and the 3 cast for the deceased Mr. Greeley was rejected by Congress, making "not cast 17." Vice-President Wilson died during his term of office. The Liberal movement was abandoned and the Democracy returned to its truths and general line of battle.

Labor Reform Party of 1872: Representatives from 12 States assembled at Columbus, promulgated a platform, and nominated a candidate, David Davis, who declined. Later, a conference of working men in New York nominated Charles O'Connor.

The Prohibition Party of 1872 nominated James A. Black as the candidate and issued a platform.

The Revenue Reform of Free Traders, and the Anti-Secret Society, each nominated presidential candidates in 1872, William S. Grossbeck being the candidate of the former, and Charles Francis Adams of the latter.

Republican Platform:—"During eleven years of supremacy it has accepted with grand courage the solemn duties of the time. It suppressed a gigantic rebellion, emancipated four millions of slaves, decreed the equal citizenship of all, and established universal suffrage. Exhibited unparalleled magnanimity, it criminally punished no man for political offense. The recent amendments to the Constitution should be cordially sustained because they are right, not merely tolerated because they are law. Complete liberty and exact equality in the enjoyment of all civil, political and public rights should be established and effectually maintained throughout the Union by efficient and appropriate State and Federal legislation. The national government should seek to maintain honorable peace with all nations, protecting its citizens everywhere. Any system of civil service under which the subordinate positions of the government are considered rewards for mere party zeal is fatally demoralizing; and we therefore favor a reform of the system. We are opposed to further grants of public lands to corporations and monopolies, and demand that the national domain be set apart for free homes for the people. The annual revenue should furnish a moderate balance for reduction of the principal [of the public debt]; and except a tax upon tobacco and liquors, should be raised by duties upon importations, so adjusted as to promote the industries of the whole country. We hold in undying honor the soldiers and sailors whose valor saved the Union. It is the duty of our government to guard with jealous care the rights of adopted citizens against the assumptions of unauthorized claims by their former governments. The franking priviledge ought to be abolished, and a way prepared for speedy reduction in the rates of postage. Recognizes the duty of so shaping legislation as to secure full protection and the amplest field for capital; and for labor, the creator of capital, the largest opportunities and a just share of the mutual profits. Congress and the president have only fulfilled an imperative duty, the protection of the ballot box; and are entitled to the thanks of the nation. We denounce repudiation of the public debt, in any form or disguise, as a national crime. Mindful of its obligations to the loyal women of America, their admission to wider fields of usefulness is viewed with satisfaction. Approves the action of Congress in extending amnesty to those lately in rebellion. Proposes to respect the rights reserved by the people to themselves as carefully as the powers delegated by them to the States and to the Federal government. It is the duty of the general government to adopt such measures as may tend to encourage and restore American commerce and ship-building.

The Democratic and Liberal Republican Platform:—"We proclaim the following principles as essential to just government: The equality of all men before the law. The union of the States, emancipation and enfranchisement, and to oppose any reopening of the questions settled by the 13th, 14th and 15th Amendments. The immediate and absolute removal of all disabilities imposed on account of the Rebellion. Local self-government, with impartial suffrage, will guard the rights of all citizens more securely than any centralized power. The supremacy of the civil power. The civil service.

The Platform of the Democratic (Straight Out), 1872, said:—"Fidelity to our constitutional system is the only protection for either [liberty or progress]. The people of each State voluntarily created their State, and the State voluntarily formed the Union for foreign and inter-state relations. All governmental powers, whether State or Federal are trust powers, limited to the written letter of the constitution and the laws. The interests of labor and capital should not be permitted to conflict. Labor is entitled to permanent consideration. Principle is to be preferred to power. Betrayed at Baltimore [by Democratic endorsement of Liberal Republicanism] into a false creed, and a false leadership by the convention, we repudiate both."

The Labor Reform Party of 1872 adopted the following Platform:

"Duty of the government to establish a just standard of distribution of capital and labor, by providing a purely national circulating medium, The national debt should be paid in good faith. The burdens of government should be so adjusted as to bear equally on all classes; exemption of bonds a violation of all just principles. To admit free all such articles of common use as we can neither produce nor grow, and lay duties for revenue mainly upon articles of luxury. Chinese labor should be prohibited. All mechanics and day laborers employed by the government, directly or indirectly, [should work only] eight hours a day. Abolition of contract labor to prisons. Money needed for prosecuting wars to be collected from the wealthy. Duty of the government to exercise its power over railroad and telegraph corporations. Reform in the civil service. Limiting the occupancy of the presidential chair to one term. Granting general amnesty, Subjection of military to civil authorities. To supervise the patent laws. Fitness should be the only recommendation to public offices, either appointive or elective.

The Prohibition Party of 1872 Platform:—Traffic in intoxicating beverages is a dishonor to Christian civilization, a political wrong of unequaled enormity, not capable of being regulated or restrained by any system of license whatever, and imperatively demands, for its suppression, effective legal prohibition, both by State and National legislation. There can be no greater peril than existing party competition for the liquor vote. We will individually use all efforts to persuade men from the use of intoxicating liquors. Competency, honesty and sobriety are indispensible qualifications for holding office. Removals for mere political differences of opinion are wrong. Salaries of public officers should take the place of fees. President should be elected directly by the people. In favor of a sound national currency. Rates of ocean and inland postage should be made as low as possible by law. Opposed to all discrimination in favor of capital against labor, as well as all monopoly and class legislation. The removal of the burdens imposed in the traffic in intoxicating drinks will emancipate labor, and will practically promote labor reform. Suffrage, without regard to sex. Extension of common schools is a primary duty of the government. A liberal policy to promote foreign immigration."

1877. The Republican National Convention met at Cincinnati, June 14, 1876. Nominations—President, Rutherford B. Hayes of Ohio, on the 7th ballot, receiving 384 votes, to 351 for J. G. Blaine, and 21 for B. H. Bristow; Vice-President, William A. Wheeler of New York.

The Democratic National Convention met at St. Louis, Mo., June 27th. Nominations—President, Samuel J. Tilden, of New York, on the second ballot, receiving 535 votes, against 85 for Hendricks, 54 for Wm. Allen, 58 for W. S. Hancock, and 6 scattering; Vice-President, Thomas A. Hendricks, of Indiana.

The "National Greenback Convention," met at Indianapolis, May 17, with nineteen States represented. Peter Cooper, of New York, and Samuel F. Cary, of Ohio, were nominated for President and Vice-President.

"A Prohibition Reform Party" Convention met at Cleveland, May 17th, and nominated Green Clay Smith, of Kentucky, and R. T. Stewart, of Ohio. Platform adopted was similar to that of 1872.

"The American National" or Anti-Secret Society presented a candidate in James B. Walker.

The centennial, or twenty-third, presidential campaign was peculiar in the fact that it was continued almost to the very day of inauguration. The Republican and Democratic candidates alone received electoral votes. The votes of South Carolina, Florida and Louisiana, especially the latter, were stoutly claimed by both parties. Finally, it became necessary for the conservative element in both parties to agree upon a plan of arbitration. Louisiana returned three sets of certificates; South Carolina, Florida and Oregon, two each. The Electoral Commission of fifteen members—5 justices of the Supreme Court, 5 Senators and 5 Representatives—formed in accordance with "An act to provide for counting votes," etc., approved January 29, 1877, counted all the above four States, by a vote of 8 to 7, for Hayes, who thus became president.

Republican Platform of 1876:—"When in the economy of Providence, this land was to be purged of human slavery, and when the strength of the government of the people, by the people, and for the people, was to be demonstrated, the Republican party came into power. Its deeds have passed into history, and we look back to them with pride. Incited by their memories to high aims for the good of our country and mankind, and looking to the future with unfaltering courage, hope and purpose, we, the representatives of the party, make the following declaration of principles. The United States is a nation, not a league. The Republican party has preserved these governments [National and State] to the 100th anniversary of the nation's birth. The permanent pacification of the southern section of the Union and the complete protection of all its citizens in the free enjoyment of all their rights. National credit demands redemption of debt and resumption of specie payment appointments should have reference to the honesty, fidelity and capacity of the appointees. All others [subordinate places] to be filled by persons selected with sole reference to the efficiency of the public service. Will hold all public officers to a rigid responsibility. The public school system is the bulwark of the American Republic. The revenue must be largely derived from duties, which should be adjusted to promote interests of American labors and advance the prospertty of the whole country. Opposition to further grants of the public lands to corporations and monopolies. The same protection shall be afforded to the adopted American citizen that is given to the native born.

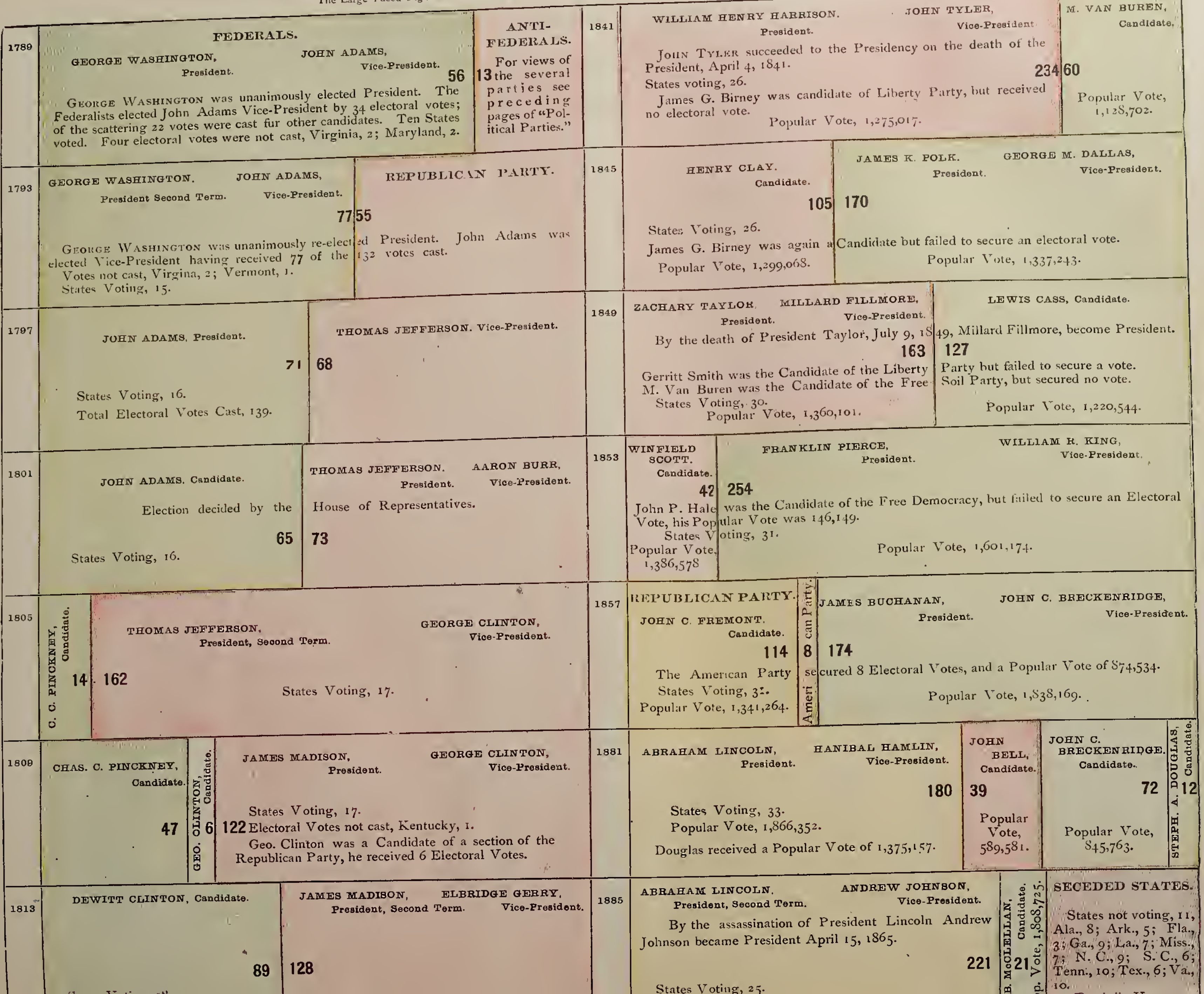
Democratic Platform:—"The administration of the Federal government to be in urgent need of immediate reform, re-affirm our faith in the permanence of the Federal Union, our devotion to the Constitution, with its amendments universally accepted as a final settlement of the controversies engendered by the Civil War. Absolute acquiescence in the will of the majority; the supremacy of the civil over the military authority; the total separation of Church and State; the equality of all citizens before just laws of their own enactment; the liberty of individual conduct, unvexed by sumptuary laws; the faithful education of the rising generation. Reform is necessary to establish, in the hearts of the whole people, the Union now to be saved from a corrupt centralism. To establish a sound currency, restore the public credit, and maintain the national honor, denounce the failure to make good the promise of the legal tender notes and the improvidence which has taken in Federal taxes thirteen times the whole amount of the legal tender notes, and squandered four times their sum. The financial imbecility which has made no advance toward resumption, demand a judicious system of preparation [for resumption]. Reform in the sum and modes of federal taxation; denounce the present tariff. Reform in public expense. To put a stop to the profligate waste of public lands. To correct the omission of a Republican Congress, and the errors of our treaties which have stripped our fellow-citizens of foreign birth, of the shield of American citizenship, and demand such modifications of the treaty with the Chinese empire as shall prevent further importation.

The Greenback Party Platform—Called into existence by the necessities of the people for financial reform and industrial emancipation. Demand repeal of the specie resumption act. A United States note, 3.65 interest, the best circulating medium ever devised. Paramount duty of the government, the full development of all legitimate business. Protest against any further issue of gold bonds for sale in foreign markets. Against sale of bonds for purchasing silver, to be used as a substitute for fractional currency.

American National or Anti-Secret Society of 1876 Platform:—"Ours is a Christian and not a heathen nation. God requires and man needs a Sabbath. Prohibition the true policy on the temperance question. Charters of all secret lodges should be withdrawn. Our amended Constitution should be preserved inviolate. Arbitration [between] nations is the most direct and sure method of securing a permanent peace. The Bible should be associated with books of science and literature in all our educational institutions. Land and other monopolies shall be discountenanced. The government should

AMERICAN ❊ POLITICAL ❊ PARTIES.

Diagram showing the Strength of Political Parties at each Presidential Election. Number of States Voting, Electoral Votes not cast, and Popular Vote of each Candidate.
The Large Faced Figures in the Diagram designate the Number of Electoral Votes secured by each Party.



1789

FEDERALS.

GEORGE WASHINGTON, President. JOHN ADAMS, Vice-President. 56

GEORGE WASHINGTON was unanimously elected President. The Federalists elected John Adams Vice-President by 34 electoral votes; of the scattering 22 votes were cast fur other candidates. Ten States voted. Four electoral votes were not cast, Virginia, 2; Maryland, 2.

ANTI-FEDERALS.

13 For views of the several parties see preceding pages of "Political Parties."

1793

GEORGE WASHINGTON. President Second Term. JOHN ADAMS, Vice-President. 77

REPUBLICAN PARTY. 55

GEORGE WASHINGTON was unanimously re-elected President. John Adams was elected Vice-President having received 77 of the 132 votes cast. Votes not cast, Virgina, 2; Vermont, 1. States Voting, 15.

1797

JOHN ADAMS, President. 71

THOMAS JEFFERSON. Vice-President. 68

States Voting, 16.
Total Electoral Votes Cast, 139.

1801

JOHN ADAMS. Candidate. 65

THOMAS JEFFERSON. President. AARON BURR, Vice-President. 73

Election decided by the House of Representatives.

States Voting, 16.

1805

C. C. PINCKNEY, Candidate. 14

THOMAS JEFFERSON, President, Second Term. GEORGE CLINTON, Vice-President. 162

States Voting, 17.

1809

CHAS. C. PINCKNEY, Candidate. 47

GEO. CLINTON, Candidate. 6

JAMES MADISON, President. GEORGE CLINTON, Vice-President. 122

States Voting, 17.
Electoral Votes not cast, Kentucky, 1.
Geo. Clinton was a Candidate of a section of the Republican Party, he received 6 Electoral Votes.

1813

DEWITT CLINTON, Candidate. 89

JAMES MADISON, President, Second Term. ELBRIDGE GERRY, Vice-President. 128

1841

WILLIAM HENRY HARRISON. President. JOHN TYLER, Vice-President. 234

JOHN TYLER succeeded to the Presidency on the death of the President, April 4, 1841.
States voting, 26.
James G. Birney was candidate of Liberty Party, but received no electoral vote.
Popular Vote, 1,275,017.

M. VAN BUREN, Candidate. 60
Popular Vote, 1,128,702.

1845

HENRY CLAY. Candidate. 105

States Voting, 26.
James G. Birney was again a Candidate but failed to secure an electoral vote.
Popular Vote, 1,299,068.

JAMES K. POLK. President. GEORGE M. DALLAS, Vice-President. 170
Popular Vote, 1,337,243.

1849

ZACHARY TAYLOR, President. MILLARD FILLMORE, Vice-President. 163

By the death of President Taylor, July 9, 1849, Millard Fillmore, become President.

Gerritt Smith was the Candidate of the Liberty Party but failed to secure a vote.
M. Van Buren was the Candidate of the Free Soil Party, but secured no vote.
States Voting, 30.
Popular Vote, 1,360,101.

LEWIS CASS, Candidate. 127
Popular Vote, 1,220,544.

1853

WINFIELD SCOTT. Candidate. 42
Popular Vote, 1,386,578

FRANKLIN PIERCE, President. WILLIAM R. KING, Vice-President. 254

John P. Hale was the Candidate of the Free Democracy, but failed to secure an Electoral Vote, his Popular Vote was 146,149.
States Voting, 31.
Popular Vote, 1,601,174.

1857

REPUBLICAN PARTY.

JOHN C. FREMONT. Candidate. 114

American Party. 8

JAMES BUCHANAN, President. JOHN C. BRECKENRIDGE, Vice-President. 174

The American Party secured 8 Electoral Votes, and a Popular Vote of 874,534.
States Voting, 31.
Popular Vote, 1,341,264.
Popular Vote, 1,838,169.

1881

ABRAHAM LINCOLN, President. HANIBAL HAMLIN, Vice-President. 180

States Voting, 33.
Popular Vote, 1,866,352.
Douglas received a Popular Vote of 1,375,157.

JOHN BELL, Candidate. 39
Popular Vote, 589,581.

JOHN C. BRECKENRIDGE. Candidate. 72
Popular Vote, 845,763.

STEPH. A. DOUGLAS, Candidate. 12

1885

ABRAHAM LINCOLN, President, Second Term. ANDREW JOHNSON, Vice-President. 221

By the assassination of President Lincoln Andrew Johnson became President April 15, 1865.

States Voting, 25.

B. McCLELLAN, Candidate. 21
Vote, 1,808,725.

SECEDED STATES.

States not voting, 11, Ala., 8; Ark., 5; Fla., 3; Ga., 9; La., 7; Miss., 7; N. C., 9; S. C., 6; Tenn., 10; Tex., 6; Va., 10.

89 | 126

States Voting, 18.
Electoral votes not cast, Ohio, 1.

1817 **RUFUS KING,** Candidate. 34 | **JAMES MONROE,** President. **DANIEL D. TOMPKINS,** Vice-President. 183

States Voting, 19.
Electoral votes not cast, Md., 3; Del., 1;

1821 **JAMES MONROE,** President, Second Term. **DANIEL D. TOMPKINS,** Vice-President.

Mr. Adams received 1 Federal Electoral Vote.
States Voting, 24.
Votes not cast, Miss., 1; Pa., 1; Tenn., 1.

1 | 231

1825 **HENRY CLAY,** Candidate. 37 | **W. H. CRAWFORD,** Candidate. 41 | **JOHN QUINCY ADAMS,** President. **J. C. CALHOUN.** Vice-President. 84 | **ANDREW JACKSON,** Candidate. 90

Election decided by House of Representatives.
States Voting, 24. Electoral votes not cast, R. I., 1.

Pop. Vote. 46,587. | Popular Vote, 44,228. | Popular Vote, 155,321. | Popular Vote, 105,321.

1829 **NATIONAL REPUBLICAN PARTY.** **JOHN QUINCY ADAMS,** Candidate. 83

Popular Vote, 509,097.

DEMOCRATIC PARTY. **ANDREW JACKSON,** President. **JOHN C. CALHOUN,** Vice-President. 178

States Voting, 24.
Popular Vote, 647,231.

1833 **WILLIAM WIRT.** 7 | **HENRY CLAY,** Candidate. 49 | **JOHN FLOYD.** 11 | **ANDREW JACKSON,** President, Second Term. **MARTIN VAN BUREN,** Vice-President. 219

Popular Vote, 530,189.

William Wirt was the candidate of the Anti-Masons. John Floyd candidate of Nullification Faction of the Democratic Party.
States Voting, 24. Votes not cast, Md., 2.
Popular Vote, 687,502.

1837 **WHIG PARTY.** **WILLIAM HENRY BARRISON,** Candidate. 73 | **DANIEL WEBSTER,** Candidate 14 | **MARTIN VAN BUREN,** President. **R. M. JOHNSON,** Vice-President. 170 | **HENRY L. WHITE,** Candidate. 26 | **WILLIAM P. MANGUM.** Candidate 11

Popular Vote, 673,656.

States Voting, 26.
Popular Vote, 761,539.

States Voting, 25.
Popular Vote, 2,216,067.

G. B. | Pop. | 10. Total, 80 Votes.

1889 **ULYSSES S. GRANT,** President. **SCHUYLER COLFAX,** Vice-President. 214 | **HORATIO SEYMOUR,** Candidate. 80 | 3 states not reconstructed Va. 10; Miss. 7; Tex. 6.

States Voting, 34.
Votes not cast, 23.
Popular Vote, 3,015,071.

Pop. Vote, 2,709,613.

1873 **ULYSSES S. GRANT,** President, Second Term. **HENRY WILSON,** Vice-President. 286 | **HORACE GREELEY,** Candidate. 63

Henry Wilson, Vice-President, died Nov. 22, 1875.
States Voting, 37.
Votes not cast, 17.
Popular Vote, 3,015,071.

Popular Vote, 2,834,079.

1877 **RUTHERFORD B. HAYES,** President. **WILLIAM A. WHEELER,** Vice-President. 185 | **SAMUEL J. TILDEN,** Candidate. 184

States Voting, 38.
Election determined by an Electoral Commission.
Three other candidates were in the field but none secured an electoral vote.
Popular Vote, 4,033,450

Popular Vote, 4,284,835

1881 **JAMES A. GARFIELD.** President. **CHESTER A. ARTHUR,** Vice-President. 214 | **WINFIELD S. HANCOCK,** Candidate. 155

President GARFIELD was assassinated July 2, 1881, died September 19, 1881, when Chester A. Arthur became President.
States Voting, 38.
Popular Vote, 4,450,921.

Popular Vote, 4,447,888.

1885 **JAMES G. BLAINE,** Candidate. 182 | **GROVER CLEVELAND,** President. **THOS. A. HENDRICKS,** Vice-President. 219

Vice-President Hendricks died November 25, 1885.
States Voting, 38.
The Prohibition candidate received 151,809 votes. The People's or Labor Party candidate secured 133,728 votes.
Popular Vote, 4,851,981.

Popular Vote, 4,874,986.

1889 **BENJAMIN HARRISON,** President. **LEVI P. MORTON,** Vice-President. 233 | **GROVER CLEVELAND,** Candidate. 168

States Voting, 38.
The Prohibition candidate secured 246,406 votes. The United Labor candidate received 144,608 votes.
Popular Vote, 5,441,923.

Popular Vote, 5,536,524.

1893 **BENJAMIN HARRISON** Candidate 145 | Weaver 22 | **GROVER CLEVELAND** President **ADLAI E. STEVENSON** Vice President 277

States Voting 44
Prohibition 279,199
People 1,122,045
Social Labor 21,191
Popular Vote 5,175,577
Popular Vote 5,556,533

furnish an ample and sound currency and a return to specie payment. Maintenance of the public credit, protection to all loyal citizens and justice to Indians and essential to the honor and safety of the nation We demand the abolition of electoral colleges."

1881.—The Republican National Convention met at Chicago, June 2, 1880. Nominations—President, James A. Garfield, of Ohio, on the 36th ballot, received 399 votes, to 306 for Ulysses S. Grant, 42 for James G. Blaine, 5 for E. B. Washburne, and 3 for John Sherman; Vice-President, Chester A. Arthur, of New York.

The Democratic National Convention met at Cincinnati, Ohio, June 22, 1880. Winfield Scott Hancock was nominated for President.

The National Greenback Convention met at Chicago, June 9, 1880, and nominated General J. B. Weaver, of Iowa, for President, and B. J. Chambers, of Texas, for Vice-President.

The Prohibition Reform Party met at Cleveland, Ohio, June 17, 1880, and nominated General Neal Dow, of Maine, for President and the Rev. Dr. Thompson, of Ohio, for Vice-President.

The American Party's candidates for 1880 were General John W. Phelps, of Vermont, for President, and Hon. S. C. Pomeroy, of Kansas, for Vice-President. They issued a platform in which the chief plank was opposition to all oath bound secret societies.

"National Liberty" convention adopted the following platform briefly stated. 1. Taxation of church property; 2. Abolition of Sabbath laws and government chaplaincies; 3. Secularization of public school education; 4. Refusal of appropriations for religious purposes.

In the twenty-fourth election for President, Garfield received 214 electoral votes, and Hancock 155, no other candidate securing a vote in the electoral college. President Garfield was shot, at Washington, D. C., on the 2d day of July, 1881, by a wretch whose name should be forgotten, and died from the effect of the wound, at Elberon, N. J., at 10:35 P. M., on Sept. 19, following.

Vice-President Arthur, on telegraphic announcement from the Cabinet, of the death of President Garfield, and on their suggestion, took the oath of office at once. It was administered at 2:15 A. M., Sept. 20, 1881, in New York City, before Judge Brady, of the State Court. The oath was subsequently re-taken in Washington City, before the Chief Justice of the Supreme Court, September 22, at 12 o'clock M.

Republican Platform:—"The Republican party at the end of twenty years since the Federal government was first committed to its charge, submits its brief report. It suppressed a rebellion which had armed nearly a million of men. It reconstructed a union of the States with freedom, instead of slavery, as its corner-stone. It transformed four millions of human beings from the likeness of things to the rank of citizens. It relieved Congress from the infamous work of hunting fugitive slaves, and charged it to see that slavery does not exist. It has raised the value of our paper currency from thirty-eight per cent. to the par of gold. It has restored payment in coin, and has given us a currency absolutely good. Railroads have increased from 31,000 miles in 1860 to more than 82,000 miles in 1879. Our foreign trade has increased from $700,000,000 to $1,150 000 000 and our exports, which were $20 000 000 less than our imports in 1860 were $261 000 000 more than our imports in 1879. Without resorting to loans, it has, since the war closed, defrayed the ordinary expenses of government, the interest on the public debt, annually over $30,000 000 for soldiers' pensions, $888,000,000 of the public debt, and by refunding the balance at lower rates has reduced the annual interest charge from nearly $151,000,000 to less than $89,000,000. All the industries revived, labor in demand, wages increased, evidences of coming prosperity greater than ever. Upon this record ask for continued support and confidence. We affirm that the work of the last twenty years has been such as to recommend itself to the favor of the nation."

Democratic Platform:—"We pledge ourselves anew to the Constitutional doctrines and traditions of the Democratic party embodied in the platform of the last national convention. Opposition to centralization; no sumptuary laws; separation of Church and State; common schools fostered and protected. Home rule; honest money; convertible into coin; strict maintenance of public faith; tariff for revenue only; subordination of the military to the civil power, and a general and thorough reform of the civil service. The right to a free ballot is a right preservative of all rights; and must and shall be maintained in every part of the United States. The existing administration is the representative of conspiracy only, and demand a reform, by statute, which shall make it forever impossible for a defeated candidate to bribe his way to the seat of a usurper by billeting villains upon the people. The great fraud of 1876-7 struck a great blow at our system of representative government. The Democratic party, to preserve the country from the horrors of a civil war, submitted. The resolution of Samuel J. Tilden, not again to be a candidate is received with deep sensibility, by purifying the public service [he] merits the lasting gratitude of his country and party. Free ships, and a living chance for American commerce upon the seas; and upon the land no discrimination in favor of transportation lines, corporations or monopolies. No more Chinese immigration.

1885.—The National Republican Convention met at Chicago, June 5, 1884, and nominated James G. Blaine, of Maine, for President, and John A. Logan, of Illinois, for Vice-President.

The Democratic National Convention met at Chicago, July 10, 1884, and chose Grover Cleveland, of New York, for President, and Thomas A. Hendricks, of Indiana, for Vice-President.

The National Greenback-Labor Convention met at Indianapolis, May 28, 1884 and nominated Benjamin F. Butler for the Presidency, and A. M. West for Vice-President.

The National Prohibition Convention met at Pittsburgh, July 23d, 1884, and nominated a full ticket, with John P. St. John, of Kansas, at the head.

The apportionment act of 1883—ratio, 1 to 151,192—based on the census of 1880, raised the membership of the House to 325, making the "total electoral vote," 401.

In 1884, in three States, Iowa, Michigan and Nebraska, there was a "fusion" of the Democratic and the National Greenback parties, on one electoral ticket. In Missouri and West Virginia, there was a "fusion" of the Republican and the National Greenback parties, on one Electoral ticket. Neither the Prohibition or Greenback ticket secured an Electoral vote,—Vice-President Hendricks died November 25, 1885.

Democratic Platform—Recognizes that new issues are born, and old issues perish. But the fundamental principles of the Democracy will ever remain the only security for the continuance of free government. But it is indispensable. The Republican party, so far as principle is a reminiscence, in practice it is an organization for enriching those who control its machinery. Frauds and jobbery in every department have called for reform. A change is demanded. Unnecessary taxation denounced. Pledged itself to purify the administration from corruption, to restore economy, to revive the respect of the law, and to reduce taxation to the lowest limit consistent with due regard to the preservation of the faith of the nation to its creditors and pensioners. To revise the tariff in a spirit of fairness to all. Taxation limited to the requirements of economical government. Reduction without depriving American labor of the ability to compete successfully with foreign labor. Internal revenue is a war tax and should be sacredly devoted to the relief of the people from the remaining burdens of the war. An American continental policy favored, without entangling alliances. The gold and silver money, or its equivilent. Equal and exact justice to all citizens, of whatever nativity, race, color, or persuasion. A free ballot and a fair count. Oppose sumptuary laws. We favor honest civil service reform and fixed salaries [of officials]; separation of Church and State, and free education by common schools. Scrupulous regard for the rights of property. Labor should be fostered. Favor the repeal of all laws restricting the free action of labor, and the enactment of laws by which labor organizations may be incorporated. The public lands to be kept as homesteads for actual settlers; all unearned lands of corporations should be restored to the public domain, and no more granted. No importation of pauper labor. Labor has a right to demand a just share of the profits of its own productions. All corporate bodies are public servants. Frequent change of officers is necessary to counteract tendencies to a caste of life-officers, and punishment of frauds and embezzlements. American civilization demands that against the immigration or importation of Mongolians to these shores our gates be closed. It is an imperative duty of this government to efficiently protect all rights of persons and property of every American citizen in foreign lands, and demand and enforce full reparation for any violation thereof. The Federal government should care for and improve the Mississippi river and other great water-ways of tha Republic. Under a long period of Democratic rule and policy our merchant marine was outstripping that of Great Britain." Under twenty five years of Republicans, our commerce has been left to British bottoms, [and they] have managed to surrender to Great Britain the control of the markets of the world. Instead of its false pretense of friendship for American labor, expressed by imposing taxes, we demand freedom for American labor by reducing taxes.

Republican Platform—Renew their allegiance to the principles upon which they have triumphed in six successive presidential elections, and congratulate the American people on the attainment of so many results in legislation and administration by which the party has, after saving the Union, done so much to render its institutions just, equal and beneficient—the safeguard of liberty and the embodiment of the best thought and highest purposes of our citizens. It has gained its strength by quick and faithful response to the demands of the people for the freedom and equality of all men; for a united nation, assuring the rights of all citizens; for the elevation of labor; for an honest currency; for purity in legislation, and for integrity and accountability in all departments of the government; and it accepts anew the duty of leading in the work of progress and reform. We lament the death of President Garfield. In the administration of President Arthur we recognize a wise, conservative and patriotic policy. It is the first duty of a good government to protect the rights and promote the interests of its own people. We therefore demand that the imposition of duties shall be made not for revenue only, but to afford security to our diversified industries and protection to the rights and wages of the laborer. Against the so-called economic system of the Democratic party which would dagrade our labor to the foreign standard, we enter our earnest protest. The Republican party pledges itself to correct the inequalities of the tariff, and to reduce the surplus. We recognize the importance of the sheep husbandry and respect the demands for a readjustment of duty upon foreign wool. We have always recommended the best money and we urge an international standard of gold and silver coinage. Propose to support such legislation as will fully and efficiently carry out the Constitutional power of Congress over inter-state commerce. We favor legislation that shall prevent unjust discrimination and excessive charges for transportation. A national bureau of labor, the enforcement of the eight hour law, and a wise and judicious system of general education by adequate appropriation from the national revenues where the same is needed. We believe that everywhere the protection to a citizen of American birth must be secured to citizens of American adoption, and we favor international arbitration. Unalterably opposed to placing our workingmen in competition with any form of servile labor, whether at home or abroad; denounce the importation of contract labor. The reform of the civil service should be completed. The public lands should be reserved, as far as possible, for small holdings by actual settlers. Demand speedy forfeiture of all land grants which have lapsed. Grateful thanks are due to the Union soldiers and sailors of the late war. Favors the policy which seeks peace and trade with all powers, but especially with those of the western hemisphere. Demand the restoration of the navy to its old-time strength and efficiency. Appointments in the Territories should be made from bona-fide citizens and residents [of each]. It is the duty of Congress to enact such laws as shall promptly and effectually suppress the system of polygamy. The people of the United States a nation and not a mere confederacy of States. The National Government is supreme within the sphere of its national duty, but the States have reserved rights which should be faithfully maintained. The perpetuity of our institutions rests upon the maintenance of a free ballot, an honest count, and correct returns. We denounce the fraud and violence practiced by the Democracy in Southern States by which the will of the voter is defeated, as dangerous to free institutions, and we solemnly arraign that party as being the guilty recipient of the fruits, and pledge our efforts to promote such legislation as will secure to every citizen, of whatever race and color, the full and complete recognition, possession and exercise of all civil and political rights."

The Prohibition Platform—Acknowledged Almighty God as the rightful sovereign of all men, from whom the just powers of government are derived, and to whose laws human enactments should conform as an absolute condition of peace, prosperity and happiness. [Here follows an arrangment of the National and State laws maintaining the traffic in alcoholic beverages, and a statement of the evil flowing therefrom]. We therefore call upon our fellow-citizens to aid in the repeal of these laws and in the legal suppression of this baneful liquor traffic. During the twenty-four years in which the Republican party has controlled the general government and many of the States, no effort has been made to change this policy. Both [Blaine and Logan] virtually recommend the perpetuation of the traffic. The Democratic party has arrayed itself on the side of the drink-makers and sellers, by declaring against 'sumptuary laws'. That there can be no greater peril to the nation than the existing competition of [both] parties for the liquor vote. Patriots should withdraw from [both.] We favor abolition of all sinecures with useless offices, and in elections by the people instead of appointments by the President. We oppose removals except to secure effectiveness in vital issues. The collection of revenues from alcoholic beverages and tobacco should be abolished; duties should be leveled for the support of the government economically administered, and in such manner as will foster American industries and labor. Public lands should ba held for homes for the people, and not bestowed as gifts to corporations, or sold in large tracts for speculation. Grateful care and support to our soldiers and sailors disabled, and to their dependent widows and orphans. We repudiate as un-American that any persons be excluded from residence or citizenship. That these reforms sink into insignificance when compared with the drink traffic, [here follows a repetition of its evils] endangering the perpetuity of free institutions. Congress should prohibit it in all places over which the government has exclusive jurisdiction; that hereafter no State should be admitted into the Union until its constitution shall expressly and forever prohibit polygamy and the manufacture and sale of intoxicating beverages; and that Congress shall submit to the States [a "prohibitory"] amendment. Call attention to the baneful effects upon labor and industry of the needless liquor business. No tariff or other legislation can so healthily stimulate production as would the suppression of this traffic. The activity and co-operation of the women of America—we gratefully acknowledge. Believing in the civil and political equality for the sexes, and that the ballot in the hands of woman is her right of protection, and would prove a powerful ally. We enunciate the principles [of woman suffrage]. We gratefully acknowledge the presence of the Divine Spirit guiding temperance reform.'

The National or Peoples Party again presented a candidate in 1884 in the person of Benjamin F. Butler, securing a popular vote of 133,728.

1889.—The National Democratic Convention met at St. Louis, Mo., June 6, 1888. Grover Cleveland, of New York, was nominated for President by acclamation, there being no other candidate. Allen G. Thurman, of Ohio, was chosen for Vice-President.

The Republican National Convention met at Chicago, Ill., June 19, 1888, and nominated Benjamin Harrison for President, on the eighth ballot, he having secured 544 votes, to 128 for John Sherman, 100 for General Alger, 59 for Judge Gresham, 4 for James G. Blaine, and 4 for William McKinley. Levi P. Morton, of New York, was chosen for Vice-President.

The Prohibition National Convention met at Indianapolis, Ind., May 31, 1888, and nominated Gen. Clinton B. Fisk, of New Jersey, for President, and Rev. John A. Brooks, of Missouri, for Vice-President.

The American Party, meeting in National Convention at Washington; August 15th, nominated Gen. James L. Curtis, of New York, for President, and James M. Grier, of Tennessee, for Vice-President of the United States.

Other National Parties nominated full Presidential tickets. The Union-Labor Party chose A. J. Streeter, of Illinois, and Charles E. Cunningham, of Arkansas. The Industrial Reform Party chose Albert E. Redstone and John Calvin. The United-Labor Party selected Robert H. Cowdry, of Illinois, and W. H. T. Wakefield, of Kansas, and the Woman Suffragists nominated Belva A. Lockwood, of Washington, and Albert H. Love, of Pennsylvania, as their respective candidates for President and Vice-President.

In many of the States an active canvass was made for the Union-Labor and the Prohibition parties. Their respective strength is given on the colored Chart, pages 98 and 99 and on page 70.

Republican Platform, adopted June 21st:—"The Republicans of the United States, assembled by their delegates in National Convention, pause on the threshold of their proceedings to honor the memory of their first great leader, the immortal champion of liberty and the rights of the People—Abraham Lincoln; and to cover also with wreaths of imperishable remembrance and gratitude the heroic names of later leaders, who have been more recently called away from our councils—Grant, Garfield, Arthur, Logan, Conkling. May their memories be faithfully cherished.

"We also recall with our greetings and with prayer for his recovery the name of one of our living heroes whose memory will be treasured in the history both of the Republicans and of the Republic—the name of that noble soldier and favorite child of victory, Philip H. Sheridan.

"In the spirit of those great leaders, and our own devotion to human liberty, and with that hostility to all forms of despotism and oppression which is the fundamental idea of the Republican party, we send fraternal congratulations to our fellow Americans of Brazil upon their great act of emancipation, which completed the abolition of slavery throughout the two American continents. We earnestly hope that we may soon congratulate our fellow-citizens of Irish birth upon the peaceful recovery of home rule for Ireland.

"We affirm our unswerving devotion to the National Constitution and to the indissoluble Union of the States; to the autonomy reserved to the States under the Constitution; to the personal rights and liberties of citizens in all the States and Territories in the Union; and especially to the supreme and sovereign right of every lawful citizen, rich or poor, native or foreign born, white or black, to cast one free ballot in public elections, and to have that ballot duly counted. We hold a free and honest popular ballot, and the just and equal representation of all the People, to be the foundation of our Republican Government, and demand effective legislation to secure the integrity and purity of elections, which are the foundation of all public authority. We charge that the present Administration and the Democratic majority in Congress owe their existence to the suppression of the ballot by a criminal nullification of the Constitution and laws of the United States.

"We are uncompromisingly in favor of the American system of protection. We protest against its destruction, proposed by the President and his party. They serve the interests of Europe: we will support the interests of America. We accept the issue and confidently appeal to the People for their judgment. The protective system must be maintained. Its abandonment has always been followed by general disaster to all interests, except those of the usurer and the sheriff. We denounce the Mills bill as destructive to the general business, the labor and the farming interests of the country, and we heartily indorse the consistent and patriotic actions of the Republican Representatives in Congress in opposing its passage.

"We condemn the proposition of the Democratic party to place wool on the free list, and we insist that the duties thereon shall be adjusted and maintained so as to furnish full and adequate protection to that industry.

"The Republican party would affect all needed reduction of the National revenue by repealing the taxes on tobacco, which are an annoyance and burden to agriculture, and the tax upon spirits used in arts and for mechanical purposes; and by such revision of the tariff laws as will tend to check imports of such articles as are produced by our people, the production of which gives employment to our labor, and release from import duties those articles of foreign production (except luxuries) the like of which can not be produced at home. * * * * *

"We declare our hostility to the introduction into this country of foreign contract labor, and of Chinese labor, alien to our civilization and our Constitution, and we demand the rigid enforcement of the existing laws against it, and favor such immediate legislation as will exclude such labor from our shores.

"We declare our opposition to all combinations of capital organized in trusts or otherwise, to control arbitrarily the condition of trade among our citizens; and we recommend to Congress and the State Legislatures, in their respective jurisdictions, such legislation as will prevent the execution of all schemes to oppress the people by undue charges on their supplies, or by unjust rates for the transportation of their products to market. We approve the legislation by Congress to prevent alike unjust burdens and unfair discriminations between the States.

"We reaffirm the policy of appropriating the public lands of the United States to be homesteads for American citizens and settlers, not aliens, which the Republican party established in 1862, against the persistent opposition of the Democrats in Congress, and which has brought our great Western domain into such magnificent development. The restoration of unearned land grants to the public domain for the use of actual settlers, which was begun under the administration of President Arthur, should be continued. * * * *

"The government by Congress of the Territories is based upon necessity only, to the end that they may become States in the Union; therefore, whenever the conditions of population, material resources, public intelligence and morality are such as to secure a stable local government therein, the people of such Territories should be permitted, as a right inherent in them, to form for themselves constitutions and State governments and be admitted into the Union. Pending the preparation for Statehood, all officers thereof should be selected from the bona fide residents and citizens of the Territory wherein they are to serve. * * * * * * * *

"The political power of the Mormon Church in the Territories, as exercised in the past, is a menace to free institutions too dangerous to be long suffered. Therefore, we pledge the Republican party to appropriate legislation asserting the sovereignty of the Nation in all Territories where the same is questioned, and in furtherance of that end to place upon the statute books legislation stringent enough to divorce the political from the ecclesiastical power, and thus stamp out the attendant wickedness of polygamy.

"The Republican party is in favor of the use of both gold and silver as money, and condemns the policy of the Democratic Administration in its efforts to demonetize silver.

"We demand the reduction of letter postage to one cent per ounce.

"In a Republic like ours, where the citizen is the sovereign and the official the servant, where no power is exercised except by the will of the people, it is important that the sovereign—the People—should possess intelligence. The free school is the promoter of that intelligence which is to preserve us a free Nation; therefore, the State or Nation, or both combined, should support free institutions of learning, sufficient to afford to every child growing up in the land the opportunity of a good common-school education.

"We earnestly recommend that prompt action be taken by Congress in the enactment of such legislation as will best secure the rehabilitation of our American merchant marine, and we protest against the passage by Congress of a free ship bill, as calculated to work injustice to labor by lessening the wages of those engaged in preparing the materials, as well as those directly employed in our ship-yards. We demand appropriations for the early rebuilding of our Navy; for the construction of coast fortifications and modern ordnance, and other approved modern means of defense for the protection of our defenseless harbors and cities; for the payment of just pensions to our soldiers; for necessary works of National importance in the improvement of harbors and channels of internal, coastwise, and foreign commerce; for the encouragement of the shipping interests of the Atlantic, Gulf and Pacific States, as well as for the payment of the maturing public debt. * * * * * * *

"The conduct of foreign affairs by the present Administration has been distinguished by its inefficiency and its cowardice. Having withdrawn from the Senate all pending treaties effected by Republican Administration for the removal of foreign burdens and restrictions upon our commerce and for its extension into better markets, it has neither effected nor proposed any others in their stead. Professing adherence to the Monroe doctrine, it has seen with idle complacency the extension of foreign influence in Central America, and of foreign trade everywhere among our neighbors. It has refused to charter, sanction, or encourage any American organization for constructing the Nicaragua Canal, a work of vital importance to the maintenance of the Monroe doctrine, and of our National influence in Central and South America, and necessary for the development of trade with our Pacific Territory, with South America and with the islands and farther coasts of the Pacific Ocean.

"We arraign the present Democratic Administration for its weak and unpatriotic treatment of the fisheries question, and its pusillanimous surrender of the essential privileges to which our fishing vessels are entitled in Canadian ports under the treaty of 1818, the reciprocal maritime legislation of 1830, and the comity of Nations, and which Canadian fishing vessels receive in the ports of the United States. We condemn the policy of the present Administration and the Democratic majority in Congress toward our fisheries as unfriendly, and conspicuously unpatriotic, and as tending to destroy a valuable National industry, and an indispensable resource of defense against a foreign enemy.

"The name of American applies alike to all citizens of the Republic, and imposes upon all alike the same obligations of obedience to the laws. At the same time that citizenship is and must be the panoply and safeguard of him who wears it, and protect him, whether high or low, rich or poor, in his civil rights. It should and must afford him protection at home, and follow and protect him abroad in whatever land he may be on a lawful errand.

"The men who abandoned the Republican party in 1884, and continue to adhere to the Democratic party, have deserted not only the cause of honest government, of sound finances, of freedom and purity of the ballot, but especially have deserted the cause of reform in the civil service. We will not fail to keep our pledges because they have broken theirs, or because their candidate has broken his. We, therefore, repeat our declaration of 1884. * * * * * *

"The gratitude of the Nation to the defenders of the Union can not be measured by laws. The legislation of Congress should conform to the pledges made by a loyal people, and be so enlarged and extended as to provide against the possibility that any man who honorably wore the Federal uniform shall become an inmate of an almshouse, or dependent upon private charity. In the presence of an overflowing treasury it would be a public scandal to do less for those whose valorous service preserved the Government. We denounce the hostile spirit shown by President Cleveland in his numerous vetoes of measures for pension relief and the action of the Democratic House of Representatives in refusing even a consideration of general pension legislation.

"In support of the principles herewith enunciated, we invite the coöperation of patriotic men of all parties, and especially of all working men whose prosperity is seriously threatened by the free-trade policy of the present Administration.

"The first concern of all good government is the virtue and sobriety of the people and the purity of the home. The Republican party cordially sympathizes with all wise and well-directed efforts for the promotion of temperance and morality."

Democratic Platform, adopted June 7th:—"The Democratic party of the United States in National Convention assembled renews the pledge of its fidelity to the Democratic faith, and reaffirms the platform adopted by its representatives in the convention of 1884, and indorses the views adopted by President Cleveland in his last earnest message to Congress as the correct interpretation of that platform upon the question of tariff reduction; and also indorses the efforts of our Democratic Representatives in Congress to secure a reduction of excessive taxation.

"Chief among its principles of party faith are the maintenance of an indissoluble Union of free and indestructible States, now about to enter upon its second century of unexampled progress and renown; devotion to a plan of government regulated by a written constitution strictly specifying every granted power and expressly reserving to the States or people the entire ungranted residue of power; the encouragement of a jealous popular vigilance directed to all who have been chosen for brief terms to enact and execute the laws and are charged with the duty of preserving the peace, insuring equality, and establishing justice.

"The Democratic party welcomes an exacting scrutiny of the administration of the executive power, which four years ago was committed to its trust in the election of Grover Cleveland, President of the United States, and it challenges the most searching inquiry concerning its fidelity and devotion to the pledges which then invited the suffrages of the people. During a most critical period of our financial affairs—resulting from over taxation, the anomalous condition of our currency, and a public debt unmatured—it has, by the adoption of a wise and statesmanlike course, not only averted disaster, but greatly promoted the prosperity of the people.

"It has revised the improvident and unwise policy of the Republican party touching the public domain, and has reclaimed from corporations and syndicates, alien and domestic, and restored to the people nearly 100,000,000 acres of valuable land, to be sacredly held as homesteads for our citizens.

"While carefully guarding the interests of the people, consistent with the principles of justice and equity, it has paid out more for pensions and bounties to the soldiers and sailors of the Republic than was ever paid before during an equal period.

"It has adopted, and consistently pursued, a firm and prudent foreign policy, preserving peace with all nations, while scrupulously maintaining all the rights and interests of our own Government and people at home and abroad.

"The exclusion from our shores of Chinese laborers has been effectually secured under the provision of a treaty, the operation of which has been postponed by the action of a Republican majority in the Senate.

"Honest reform in the civil service has been inaugurated and maintained by President Cleveland, and he has brought the public service to the highest standard of efficiency, not only by rule and precept, but by the example of his own untiring and unselfish administration of public affairs.

"In every branch and department of the Government under Democratic control, the rights and the welfare of all the people have been guarded and defended; every public interest has been protected, and the equity of all our citizens before the law, without regard to race or color, has been steadfastly maintained.

"Upon this record thus exhibited, and upon the pledge of a continuance to the people of the benefits of Democracy, it invokes a renewal of popular trust by the reëlection of a Chief Magistrate who has been faithful, able and prudent, and invokes, in addition to that trust, the transfer also to the Democracy of the entire legislative power.

"The Republican party, controlling the Senate and resisting in both Houses of Congress a reformation of unjust and unequal tax laws—which have outlasted the necessities of war, and are now undermining the abundance of a long period of peace—deny to the people equality before the law and the fairness and the justice which are their right. The cry of American labor for a better share in the rewards of industry is stifled with false pretenses; enterprise is fettered and bound down to home markets; capital is discouraged with doubt, and unequal, unjust laws can neither be properly amended nor repealed. The Democratic party will continue, with all the power confided to it, the struggle to reform these laws in accordance with the pledges of its last platform, indorsed at the ballot-box by the suffrages of the people. Of all the industrious freemen of our land, the immense majority, including the tiller of the soil, gain no advantage from excessive tax laws, but the price of nearly everything they buy is increased by the favoritism of an unequal system of tax legislation.

"All unnecessary taxation is unjust taxation. It is repugnant to the creed of Democracy that by such taxation the cost of the necessaries of life should be unjustifiably increased to all our people. Judged by the Democratic principles the interests of the people are betrayed when, by unnecessary taxation, trusts and combinations are permitted to exist, which, while unduly enriching the few that combine, rob the body of our citizens by depriving them of the benefits of natural competition. Every rule of governmental action is violated when, through unnecessary taxation, a vast sum of money—far beyond the needs of an economical administration—is drawn from the people, the channels of trade, and accumulated as a demoralizing surplus in the National Treasury.

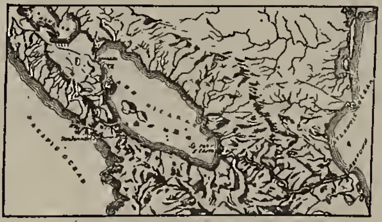
"The money now lying idle in the Federal Treasury resulting, from superfluous taxation amounts to more than $125,000,000, and the surplus collected is reaching the sum of more than $60,000,000 annually. Debauched by this immense temptation, the remedy of the Republican party is to meet and exhaust, by extravagant appropriations and expenses, whether Constitutional or not, the accumulation of extravagant taxation. The Democratic policy is to enforce frugality in public expense and abolish unnecessary taxation.

"Our established domestic industries and enterprises should not and need not be endangered by the reduction and correction of the burdens of taxation. On the contrary, a fair and careful revision of our tax laws, with due allowance for the difference between the wages of American and foreign labor, must promote and encourage every branch of such industries and enterprises by giving them assurance of an extended market and continuous operations. In the interests of American labor, which should in no event be neglected, the revision of our tax laws contemplated by the Democratic party should promote the advantage of such by cheapening the cost of necessaries of life in the home of every working man and at the same time secure to him steady and remunerative employment.

"Upon this question of tariff reform, so closely concerning every phase of our National life, and upon every question involved in the problem of good government, the Democratic party submits its principles and professions to the intelligent suffrages of the American people."

THE NICARAGUA CANAL.

THE WORLD'S ATTENTION is especially called to the progress that the American Nicaragua Canal Company is making with its construction work. The necessity of a water-passage across the Central American neck that joins the Americas long ago satisfied American minds that the only feasible place for such a water-way was to be found in Nicaragua, through a utilization of the Nicaragua Lake, and, for some distance, the rivers on either side of the lake. The route from the Atlantic to the Pacific will be 169 miles, of which only twenty-seven will be entirely artificial. Six locks will be required, but the modern ship-canal lock, of enormous size, and operated by powerful machinery, offers but very slight obstruction or delay to navigation. To attain the level of the lake, a ship will be lifted, in three successive locks, a total distance of 112 feet. The descent on the Pacific coast to Brito is effected by means of two locks. No serious engineering obstacles of any description oppose the work, nor is it thought that any financial difficulties will retard the operations. The great development of the Pacific coast states makes this canal important above all else as essentially a part of our coast line, and our avenue of the coasting trade, and, as well, as our foreign trade with the South American Countries, China, Japan, and the South Pacific Islands. It will have its full share of the traffic of all countries, and will play no small part in the advancement of human intercourse and the growth of international peace and unity.



NICARAGUA, SHOWING LAKE AND CANAL.

The following figures, given by its President, forcibly present the claims that the Nicaragua Canal has upon the people of the United States:

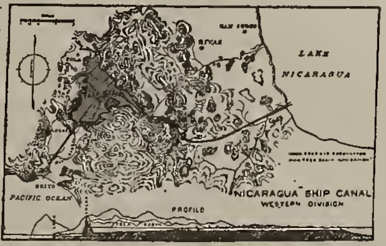
New York and Liverpool by "The Horn" are equally distant from San Francisco, viz.: 15,600 miles, and the same is true of all other ports on the Pacific coast. By the canal New York will be distant from San Francisco 4,900 miles, whilst Liverpool will be distant from San Francisco 7,600 miles, or a difference in favor of New York over Liverpool of 2,700 miles; and this difference in favor of New York over Liverpool holds good as to all the ports on the Pacific coast of both North and South America.

At the present time there are more than 70,000,000 of people in and around the Pacific ocean who will be brought nearer to New York by distances varying from 3,000 to 10,000 miles than they now are. This takes no acount of the vast population of China and India. A reference to the map will show that the east coast of China is nearer New York by Nicaragua than to Liverpool by the Suez. Shanghai is 300 miles nearer New York by the Nicaragua route than to Liverpool by Suez. The distance from New York to Yokohama is shortened 6,000 miles by the canal. This brings New York 2,000 miles nearer Yokohama than Liverpool is by the Suez, thus giving to New York an advantage over Liverpool in competing for the trade of Japan. This advantage, which is the cost of transportation for a distance of 2,000 miles, should enable New York to monopolize the trade of Japan. The same is true of Corea, which has within the last few years been opened to the commerce of the world by the diplomacy of the United States. Melbourne, in Australia, and Auckland, in New Zealand, are brought 4,000 miles nearer New York by the canal than by "The Horn."

Summing up his statement, Mr. Miller estimates that the foreign commerce of the countries bordering on the Pacific, which would be attracted to the canal, amounts to more than $1,200,000,000 per annum, and to a tonnage of over 9,000,000 tons.

This is the substance of Mr. Miller's commercial statement, but he has omitted one important aspect from this point of view, viz.: That this very increase of Pacific state population will make up in travel and valuable goods traffic far more than any loss of heavy freight the roads now carry at high charges. The overland roads will have to convey passengers considerably cheaper than they now do, but they will have several times as many to carry. California, Oregon and Washington have only two millions of people, but the canal would increase that number to ten millions speedily. The situation turns on the cost of transportation. It costs so much now to market their surplus products that the industrial classes are kept constantly poor. The Central and Union Pacific lines have overcharged the Pacific States and Territories not less than $200,000,000 since they were built by government credit, and a few grabbers of the Union Pacific clique have put the plunder in their pockets. Had reasonable charges been made for freight and passengers on these roads the population of the Pacific States now would be six instead of two millions, and the Territories beyond the 100th longitude would have three or four times their present numbers.

A bill is now pending before Congress which provides that the Government shall guarantee the principal and interest of $100,000,000 of the company's 4 per cent. bonds, and limit the issue to this sum, in consideration of which the company shall turn over $70,000,000 of the capital stock of $100,000,000 to the Government. This would seem a fair business proposition, by which the Government could sustain no loss, at the same time would be giving its guaranty a great work that must enhance enormously the commercial interests of the country.



The narrow escape of this country from a war with Chile called the attention of our people afresh to the necessity of such a canal. That necessity is none the less overwhelmingly apparent and urgent from the fact that we have escaped war with Chile. Nor is the sentiment of our people less favorable to the question of Government help. The Italian and Chilean war scare was an object lesson, setting forth the absolute necessity, not only that this canal must be built, but that this Government must control it when built. If the funds do not come from that source, they will come from some other. No one can dispute but what the canal will prove of immense commercial advantage to this country; that it is an absolute necessity in case of war; that the prosperity of the Pacific coast States will be greatly enhanced, as well as the country at large; that its control must be vested in this Government; this being conceded, it would seem that the Government should take steps to aid in its construction, especially as it takes no risks.

The United States cannot afford any political partnership with any other foreign power on this continent, least of all in the Nicaragua Canal. The Nicaragua route should be under American control, and the doctrine of President Monroe will protect it in American hands. Its construction will be a practical and complete vindication of the Monroe doctrine, assuring our friendly influence with our sister republics. This great enterprise should be considered a great American national enterprise, enhancing American commercial prosperity, extending its trade, cheapening its transportation cost, increasing its population in sections now sparsely settled, heightening its prestige among the other American nations, and appealing to the patriotic impulses of all.

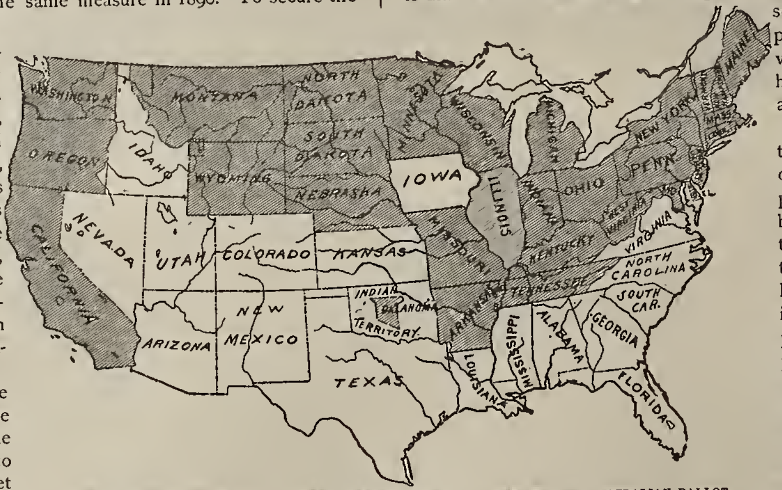
The Nicaragua Canal Company has a most favorable concession from Nicaragua for one hundred years. Under the terms thereof they are compelled to expend $2,000,000 in the work the first year. Over $5,000,000 has thus far been expended in the work.

THE AMERICAN BALLOT-REFORM.

NOT FOR many years has our country known a legislative movement so persistent, so zealously and ably championed, or so far-reaching in its possible results, as the present agitation for ballot-reform. A majority of the states and territorial legislatures have been won for the cause, but in many of the others a long and hard fight is yet to be made. It is strictly the people's cause. It commands no paid lobby, no "barrels," no influence; opposed to it by every known political method are the "machine" politicians of both great parties, but notwithstanding all opposition its friends, after four years of agitation, can point with pride to twenty-nine ballot-reform laws on the statute-books of as many states. The system in vogue in the Australian colonies became more popular in this country the more fully it was understood, and the system, with various modifications, has been now adopted by the states named.

The first State to practically introduce it was Massachusetts, in 1888, followed later by Kentucky. Following these examples, nine States adopted the new system the following year, with thirteen States and Territories adopting the same measure in 1890. To secure the greatest privacy to the voter is the essential feature of all these enactments. This is provided for by all the new laws, through the mechanical arrangement of the booths, guard-rails, etc. The laws in force in the various States may not all have secured absolute secrecy, but they certainly have come very close to bringing about this millennium in modern election methods.

The laws protect the blind and the illiterate voters who cannot read the tickets. Those unable to prepare their own ticket are assisted by the election judges in some States, and in others they may select a person to accompany them within the booth. Some laws, like those of Missouri, specify that the judges shall perform this service for the voter when it is requested. New York and New Jersey have separate ballots for each of the parties, which require no marking unless the voter wants to scratch, making no provisions for those unable to read or write.



THE SHADED PARTS OF THE MAP SHOW WHICH STATES HAVE ADOPTED THE AUSTRALIAN BALLOT.

There are two methods of grouping the names on the ticket, and both have been tried. The first of these is the English, or more properly, the original Australian style, of alphabetical arrangement of the names of the candidates under the title of the office. This is used by the following States: California, Kentucky, Massachusetts, Minnesota, Montana, Nebraska, New Hampshire, Oregon, Rhode Island, Tennessee, Vermont, Washington and Wyoming.

The second is known as the Belgian system, and consists of grouping all nominations and offices by parties. It is used in Missouri, Ohio, Wisconsin, Delaware, Illinois, Indiana, Maine, Maryland and Oklahoma Territory.

In addition to its reform law Massachusetts has a bell, and some mechanism in each ballot-box, which registers and cancels the votes. This apparatus was adopted before the ballot-reform law was proposed, and has proved to be a most useful and practical arrangement. It has proved to be not only a triumph of Yankee ingenuity, but a most useful and practical arrangement. The New Hampshire legislature in 1891 adopted it as an accompaniment of the new ballot law of that State. The register indicates the number of ballots deposited, each one of which is canceled. If, by any means, two should be deposited at once only one could be canceled, or indicated by the register.

Missouri has the peculiar requirement that the voter shall indicate his choice of candidates by erasing all except those for whom he intends to vote. It was probably supposed that this would render the counting less difficult, but Oregon is the only other state that has deemed this feature worthy of imitation. It is intended by the Delaware Legislature that the task of marking ballots shall be reduced to a minimum in that state by the use of rubber stamps, to be furnished the voters in place of pencils or ink. California adopts the same device. The "paster" ballot is permitted in New York. It is difficult to see what substantial gain results from the use of the separate ballots, except, possibly, to the illiterate voter. In New York they have proved a clumsy and an expensive device.

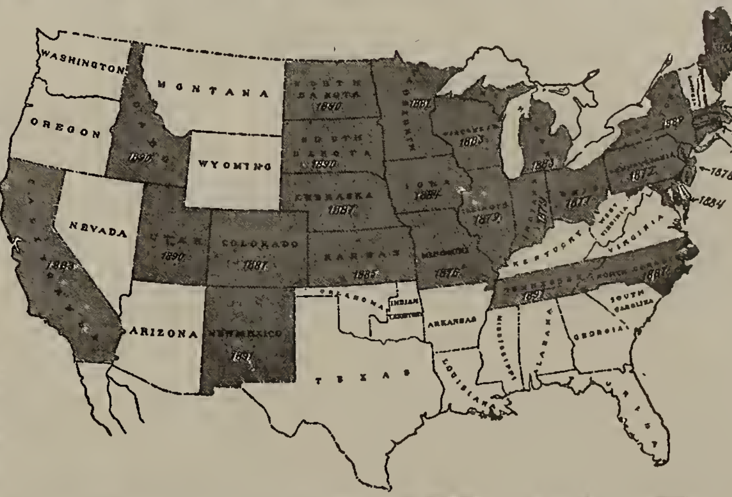
All the laws, except those of Connecticut, require the ballot to be printed at public expense by State or local authorities. In Connecticut only the blank paper is officially furnished. The printing is still done by the party managers. The old practice of "ticket peddling," both before and during elections, is continued, with all its attendant evils, which need not be here described. Michigan and New Jersey, although they have secured official printing, make the same mistake of allowing the ballots to be distributed before election. California's "ballot law" possesses two distinctive features. In nominating candidates no political party is recognized which polled less than three per cent. of the total vote at the last preceding election. Refuge for independent movements must be in the "nomination papers," which must receive the signatures of not less than five per cent. of the total vote of the state or district, or must bear the entire expense of printing and circulating "pasters" for their candidates. The other peculiar feature is the arrangement by officers, but permits a straight party ticket to be voted by merely placing a mark (o) opposite the name of the party at the top. Hence the privilege of individual selection is sacrificed.

It is the source of special gratification to the advocates of a free ballot in this country that in 1892 over seventy per cent. of the votes cast for President will be cast under the ballot reform system. Those States which in past years have been most foully tainted by electoral corruption, in both federal and state elections, the "doubtful states," will cast their presidential votes in the contest of 1892 under improved conditions in the enforcement of these new statutes; therefore the whole American people have most vital interests at stake.

UNITED STATES LABOR BUREAUS.

THIS COUNTRY is only now beginning to appreciate the importance of accurate and elaborate statistical inquiry as a basis for law-making, and an aid to intelligent administration. Massachusetts was the first state to establish (1869) a bureau of labor statistics Other states, recognizing the important stand that Massachusetts had taken, created similar bureaus. On January 1, 1892, there were twenty-five of these state bureaus engaged in making the most varied and interesting studies of the industrial conditions of the population, and putting forth from year to year a series of volumes that is fast growing into a magnificent library of social and economic data, touching the material status of the American people.

The purpose of these bureaus has been construed broadly, and their lines of inquiry have reached out to include topics far beyond strict records as to wages in various industries, strikes and lock-outs, and the immediate data of industrial life. By much intercommunication, and by periodical meetings of the directors, the several bureaus are enabled to unite, not infrequently, in making concurrent studies upon identical plans in some desired field.



MAP SHOWING STATES THAT HAVE ESTABLISHED LABOR BUREAUS. WITH DATES OF ESTABLISHMENT.

The success of the State bureaus, and the growth of interest in industrial statistics, led to the establishment in 1885 of a national bureau at Washington, since entitled "The Department of Labor." Upon the result of investigation, initiated by the superintendent, there has been based a vast amount of legislation for the protection of the working classes. The work of that department has received the unanimous approval of public men of both great parties, of the workingmen's organizations of the entire country, and of scholarly and scientific economists and statisticians. On March 3, 1891, the United States Senate adopted a resolution, and appointed a committee, to ascertain the effect of the tariff laws upon "imports and exports, the growth, development, production and prices of agricultural and manufactured articles at home and abroad, and upon wages, domestic and foreign." Through the co-operation of the "Department of Labor" this Senate committee will soon report the result of their honest and faithful efforts, giving the most authoritative and extensive collection of statistics of wholesale and retail prices of goods, and of wages, that have ever been brought together in any country. The report will be very voluminous, but it will stand as a rich mine in which to dig for particular facts when desired.

The plans of the committee comprehend the collection of the retail prices of leading commodities, and the wages of labor from June 1, 1889, to September 1, 1891, inclusive, the results showing actual sales, prices of goods, and rates of wages; the collection of wholesale prices of leading commodities, and the wages of labor as shown by principal occupations in various industries and callings from 1840 to 1891, inclusive; the collection of prices paid by the government for articles purchased during the same years for the use of the government, for this and foreign countries, relating to prices and wages, and a collection of facts relating to the introduction of new inventions and processes which have affected the rates of wages and the prices of commodities All the foregoing facts are to be properly analyzed with reference to the course of prices and wages, and the cost of living, with the view of ascertaining, if possible, the relative condition of the people at various times.

The work is being done in a thoroughly impartial manner, and through unanimous decisions of the committee.

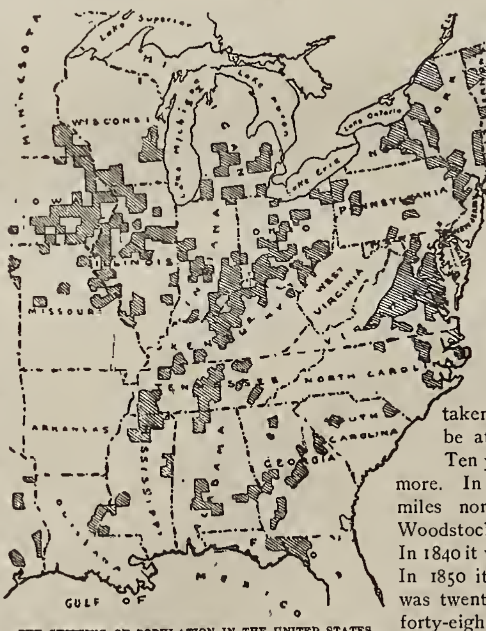
The committee is expecting to be able to complete its labors and the analysis of the facts so as to make a report to the United States Senate late in the spring. The details of the results will make a vast and valuable collection of data not to be found in any of the reports of our own or of other governments.

During the past two years in almost every part of the country laws have been passed for the protection of wage-earners. Of special importance was the new weekly-payment law, which applies to all corporations except railroad companies. Maryland prohibits railroad companies from keeping from employes any part of their wages for relief or insurance purposes. Ohio forbids contracts by which railroad employes surrender rights to damages. The same state limits the railroad working day to ten hours, and forbids employes being kept on duty more than twenty-four hours consecutively — assuredly not an unreasonable provision. Women and children may not be employed as factory operators in New York or Virginia for more than ten hours in the day. Iowa and Ohio establish Labor Day as an annual holiday. Kentucky and Ohio offer some measure of protection to members of labor unions by permitting the trade-marks used to designate the products of their labor to be registered. There are numerous provisions for the safety and well-being of people engaged in various employments. In Washington managers of mines must use a certain kind of safety cage for lowering and lifting the miners. Iowa requires automatic couplers and brakes on all cars and engines. In Massachusetts manufacturers are to report all accidents to the employes to the proper authorities. Vigorous "anti-trust" laws were passed in 1891 in Iowa, Kentucky, Louisiana, Mississippi and North Dakota. All restraint of trade is declared illegal. By the Louisiana statute persons "monopolizing, or attempting to monopolize, any part of trade or commerce," are deemed guilty of a misdemeanor.

In Feb., 1892, Mr. Warner, of New York, introduced a resolution in Congress, recommending an investigation of the "sweating and tenement house labor system." The resolution was reported favorably upon and will doubtless pass the House. No doubt the Department of Labor will be called upon to make this investigation, for no committee of Congress could or would get down to the bottom facts of the "Sweating System," by careful and personal work on the grounds, as would the agents of the Labor Bureau.

THE SHIFTING POPULATION OF THE UNITED STATES.

THE SHIFTING CURRENT of population of this and European countries may be studied to much purpose. At each Census the steady drift of country people to the towns is shown. The map, which indicates the regions in the United States where population has actually declined in the decade, is significant of great changes in the methods and character of rural industry. According to the Eleventh Census the increase of Urban population was greater during the decade than at any previous census. In 1790 the proportion was but 3.35 per cent. of the population, the increase to 1880 being quite regular, while from 1880 to 1890 it made a leap from 22.57 to 29.12 per cent., thus illustrating in a forcible manner the accelerated tendency of our population toward city life. The urban population in 1890 was 18,235,670, of which over one-half, 51.58 per cent., is embraced within the North Atlantic division, and nearly thirty per cent., 28.78, in the Northern Central divisions. In the South Atlantic division it is but 16.04 per cent. to the total population, or less than one-sixth, and South Central division but 10.45 per cent., the proportion of urban to the total population in all the Southern States being less than 13 per cent. The Western division, 29.74 per cent. of the whole population, is classed as urban.



THE SHIFTING OF POPULATION IN THE UNITED STATES,
The shaded areas denote the places where population has diminished in the last ten years.

The Superintendent of the Eleventh Census, commenting on the urban population of this country, states that the published records of former Censuses, whose urban population has been defined as that element living in cities, or other closely aggregated bodies of population containing 8,000 inhabitants or more. This definition of the urban element, although a somewhat arbitrary one, was used by him in the discussion of the results of the 1890 Census, in order that an intelligent and satisfactory comparison might be made directly with those of earlier Censuses. Mr. Porter further says that "the limit of 8,000 inhabitants is, however, a high one, inasmuch as most of the distinctive features of urban life are found in smaller bodies of population. Recognizing this fact the discussion of the urban class was in 1880 extended in part to include all such bodies of population down to a limit of 4,000."

The rapid increase in the urban element, over that of the increase in population, in the two divisions first named, is due to the equally rapid extension of manufactures and commerce, requiring the aggregation of the inhabitants into compact bodies. In the South Atlantic and Central divisions the proportion is comparatively small. The industries of these States are mainly agricultural. Manufacturing and mining are still in their infancy. Mining, commerce, and manufactures in the Western States and Territories are in a much more advanced stage, as is shown by the greater proportion of the urban population.

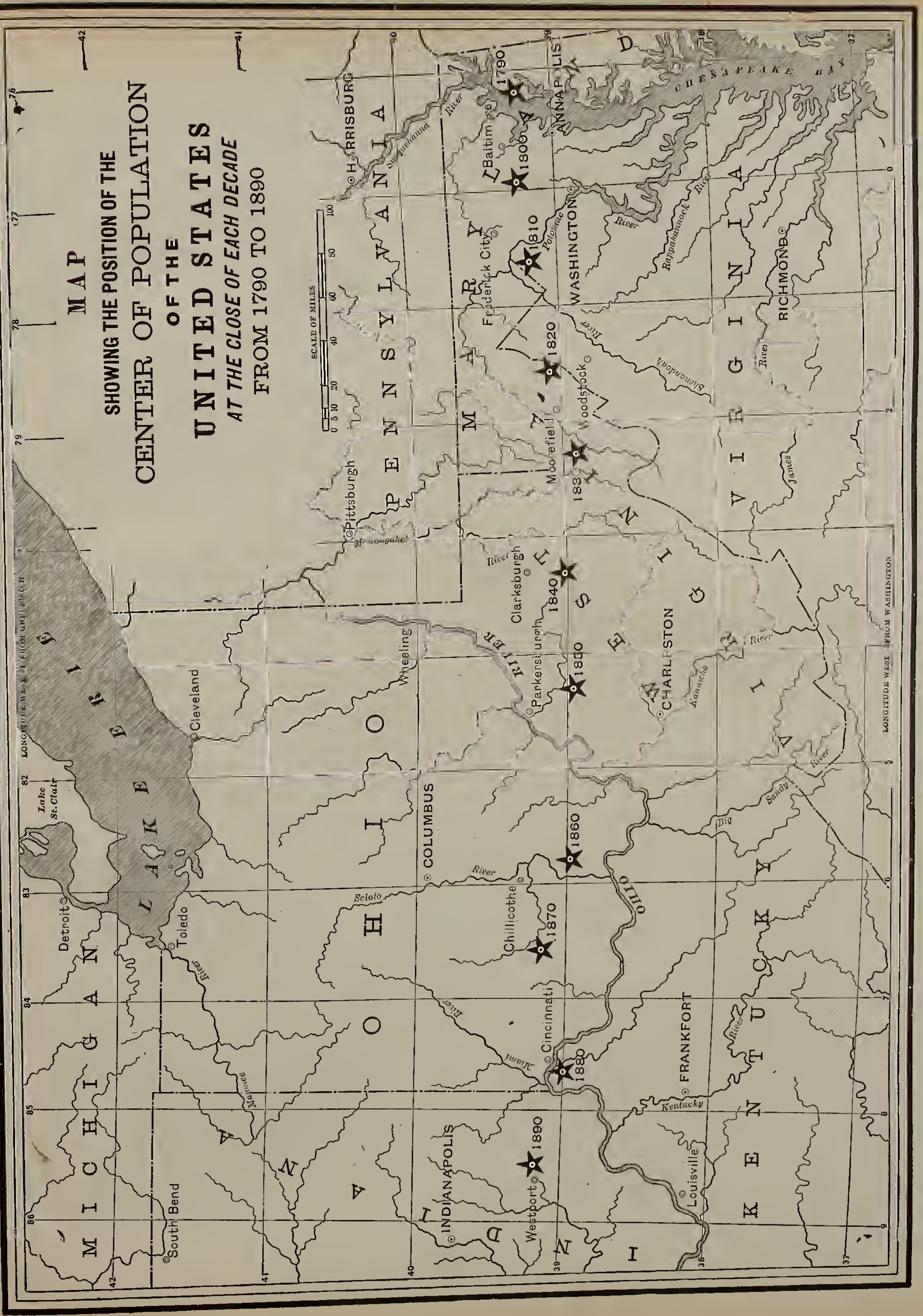
The Hon. R. P. Porter, Superintendent of the Eleventh Census, in defining on what constitutes a city, says that the Census Office has consistently maintained the policy of including only such population as lives within the charter limits, because no other defined limits exist. In many cases, however, this does not give to the city all the population which naturally belongs to it. There may be populous suburbs, which are to all intents and purposes parts of the city, whose inhabitants transact business within the city, who are served by the same post-office, etc., but who, living without the charter limits, are not included in the city's population. Of this, New York is a forcible example. Within a radius of fifteen miles of the City Hall the people are in effect citizens of New York, so far as their business and social interests go, although politically they live in different cities and States. This body of population contains a population of over 3,000,000. Next to London, New York and its suburbs form the largest city of the globe. Other cases are those of St. Paul and Minneapolis, whose corporate limits join one another, and Bristol, Tenn., and Bristol, Va., two corporations whose line of division follows the middle of the main street of the city. Texarkana, Texas, and Texarkana, Ark., is a similar case.

It is a matter of interest also to note from decade to decade the persistence with which the Center of Population adheres in its westward march to the 39th parallel. It has now nearly reached Greensburg, Indiana, and the Chicago *Herald* has built there a monument to mark the western progress of our "star of empire."

The Center of Population advanced south before it moved west. At the close of the Revolutionary War the first national census, taken in 1790, showed the Center of Population to be at a point twenty-three miles east of Baltimore. Ten years later it was eighteen miles west of Baltimore. In 1810 it had moved south to a point forty miles northwest of Washington. In 1820 it was at Woodstock, Va. In 1830 it was at Moorefield, W. Va. In 1840 it was sixteen miles south of Clarksburg, W. Va. In 1850 it was near Parkersburg, W. Va. In 1860 it was twenty miles south of Chillicothe. In 1870 it was forty-eight miles east of Cincinnati. In 1880 it was eight miles west of Cincinnati, and it is now twenty miles east of Columbus, Ind. Since 1890 the Center of Population has been moving steadily toward Chicago, the World's Fair city.

The Center of Population, as defined, is the point at which equilibrium would be reached were the country taken, as a plane surface, itself without weight, but capable of sustaining weight, and loaded with its inhabitants, in number and position as they are found at the period under consideration, each individual assumed to be of the same gravity as every other, and, consequently, to exert pressure on the pivotal point directly proportioned to his distance therefrom. In short, it is the Center of Gravity of the population of the country. The Center of Gravity that point in a body or system of bodies rigidly connected, upon which the body or system acts upon only by the force of gravity, will balance itself in position.

The Center of Magnitude is that point in a body equally distant from all its external parts. If we include in our estimate of this Center of the United States, taking the extreme eastern point of Maine, the most southern of Florida, and the farthest northern and western point in Alaska, this Center would be at a point about 150 miles east of north from San Francisco, Cal.



MAP
SHOWING THE POSITION OF THE
CENTER OF POPULATION
OF THE
UNITED STATES
AT THE CLOSE OF EACH DECADE
FROM 1790 TO 1890

1790
1800
1810
1820
1830
1840
1850
1860
1870
1880
1890
SCALE OF MILES
0 5 10 20 40 60 80 100
LONGITUDE WEST FROM GREENWICH
LONGITUDE WEST FROM WASHINGTON
LAKE ERIE
Lake St. Clair
CHESAPEAKE BAY
MICHIGAN
PENNSYLVANIA
MARYLAND
OHIO
INDIANA
WEST VIRGINIA
VIRGINIA
KENTUCKY
HARRISBURG
Baltimore
ANNAPOLIS
WASHINGTON
Frederick City
Woodstock
Moorefield
Pittsburgh
Clarksburgh
Parkersburgh
Wheeling
CHARLESTON
RICHMOND
Cleveland
Toledo
Detroit
COLUMBUS
Chillicothe
Cincinnati
FRANKFORT
Louisville
INDIANAPOLIS
Westport
South Bend
Susquehanna River
Potomac River
Rappahannock River
Shenandoah River
James River
Monongahela River
Ohio River
Kanawha River
Big Sandy River
Scioto River
Miami River
Maumee River
Kentucky River

NATIONAL SOLDIERS' HOMES.

Their Location and Regulations for Admission to Them.

THE UNITED STATES GOVERNMENT soon after the close of the Civil War established at convenient points National Homes for disabled United States soldiers and sailors. The following are the rules governing them and who are eligible for admission:

All disabled soldiers and sailors of the United States—whether of the late war or the Mexican War—are notified that homes have been established at the places above named, for all such as are unable to earn a living by labor. All the ordinary comforts of a home are provided—chapels for religious service, halls for concerts, lectures, etc., hospitals with experienced surgeons and nurses, library and reading-rooms, amusement halls, post and telegraph offices, stores, etc. Good behavior ensures the kindest treatment.

Soldiers and sailors are especially informed that the Home is neither an hospital nor almshouse, but a home where subsistence, quarters, clothing, religious instruction and amusements are provided by the Government of the United States. The provision is not a charity, but is a reward to the brave and deserving, and is their right, to be forfeited only by bad conduct at the Home, or conviction of heinous crimes.

A soldier or sailor desiring admission may apply by letter to either of the managers, whereupon a blank application will be sent to him, and if he be found duly qualified, transportation will be furnished; or he can apply personally, or by letter, at the branch nearest to his place of residence.

REQUIREMENTS FOR ADMISSION.

1. An honorable discharge from the United States for service during Rebellion or Mexican War.
2. Disability which prevents the applicant from earning his living by labor.
3. Applicants for admission will be required to stipulate and agree to abide by all the rules and regulations made by the Board of Managers, or by their order; to perform all duties required of them, and to obey all the lawful orders of the officers of the Home. Attention is called to the fact that by the law establishing the Home the members are made subject to the Rules and Articles of War, and will be governed thereby in the same manner as if they were in the Army of the United States. Applicants must state whether or not they have been in a Home before.
4. A soldier or sailor must forward with his application for admission his Discharge Paper, and when he is a pensioner his Pension Certificate, before his application will be considered, which papers will be retained at the branch to which the applicant is admitted, to be kept there for him, and returned to him when he is discharged. This rule is adopted to prevent the loss of such papers and certificates, and to hinder fraudulent practices; and no application will be considered unless these papers are sent with it. If the original discharge does not exist, a copy of discharge, certified by the War or Navy Department, or by the Adjutant-General of the State, must accompany the application. On admission he must also transfer his Pension Certificate to the Home, and the moneys secured thereby, and empower the treasurer of the Home to draw said moneys, and to hold and dispose of them, subject to the laws of Congress, and the rules, regulations and orders which have been or may hereafter be made by the Board of Managers of said National Home for Disabled Volunteer Soldiers. Pensioners receiving over $16 a month will not be admitted.

REGULATIONS GOVERNING PAYMENT OF PENSIONS.

The pensions to be paid to the beneficiaries of the National Home for Disabled Volunteer Soldiers, under the act approved February 26, 1881, making appropriations for the payment of invalid and other pensions of the United States for the fiscal year ending June 30, 1882, etc., shall be held by the treasurers of the branches, and be paid over to the pensioners at such times and in such amounts as the Governors may direct, with the following reservations:

A pensioner having a wife, child or parent dependent upon him may send, or may direct that all of his pension money shall be sent, to such dependent relative.

The Governors may prevent a hurtful or wasteful or extravagant use of the pension money in any case by retaining a sufficient amount until in their opinion the danger of harm or waste or extravagance has passed; any balance due the pensioner at the date of his death shall be paid to his lawful heirs.

BRANCHES OF THE NATIONAL HOME.

BRANCHES.	Location.	No. of Members	BRANCHES.	Location.	No. of Members
Central	Dayton, O.	4,683	Pacific	Santa Monica, Cal.	557
Northwestern	Milwaukee, Wis.	1,955	Marion	Marion, Ind	518
Eastern	Togus, Me.	1,007			
Southern	Hampton, Va.	2 604	Total		13,928
Western	Leavenworth, Kan.	2,004			

Above is average number present in National Home for year ending June 30, 1891. Total number cared for in National Home during same period, 21,157.

STATE HOMES FOR DISABLED VOLUNTEER SOLDIERS.

STATE.	Location.	No. of Members	STATE.	Location.	No. of Members
California	Yountville	234	New Jersey	Kearney	313
Connecticut	Noroton	246	New York	Bath	1,058
Illinois	Quincy	882	Ohio	Sandusky	595
Iowa	Marshalltown	353	Pennsylvania	Erie	423
Kansas	Dodge City	30	Rhode Island	Bristol	39
Massachusetts	Chelsea	193	South Dakota	Hot Springs	58
Michigan	Grand Rapids	463	Vermont	Bennington	59
Minnesota	Minnehaha	131	Wisconsin	Waupaca	99
Nebraska	Grand Island	73			
New Hampshire	Tilton	40			5,292

Above is average number present in State Homes for year ending June 30, 1891.

STATISTICS OF SOLDIERS' HOMES FOR THE FISCAL YEAR ENDING JUNE 30, 1891.

	1891.
Average number of members present, National Homes	13,931
Average present and absent, National Homes	17,528
Whole number cared for, National Homes	21,157
Deaths National Homes	1,026
Average age of number cared for, National Homes	57.47
Average age of those who died, National Homes	63.44
Amount expended for support of Home less construction and repairs, National Homes	$1,943,385.04
Annual cost of maintenance of each man, National Homes	139.50
Pensioners, number, National Homes	11,190
Pensions, amount, National Homes	$1,421,841.76
Average amount of pension, National Homes	127.06
Amount reported as sent to families through Home Treasurers, National Homes	327,000.31
Amount paid pensioners direct, National Homes	1,040,147.03
Average number present in State Homes	5,292
Amount paid State Homes	$520,697.85
Average number present for the year in National and State Homes	19,106

UNITED STATES PENSION STATISTICS.

PENSION AGENCIES AND GEOGRAPHICAL LIMITS, JUNE 30, 1891.

AGENCIES.	Geographical Limits.	Pay Places Naval Pensioners.	Disbursements.
Augusta	Maine	Boston	$2,821,409
Boston	Connecticut, Massachusetts, Rhode Island	Boston	6,447,082
Buffalo	Western New York	New York City	6,440,389
Chicago	Illinois	Chicago	9,457,983
Columbus	Ohio	Chicago	13,064 887
Concord	New Hampshire, Vermont	Boston	2,937,928
Des Moines	Iowa, Nebraska	Chicago	6,887,752
Detroit	Michigan	Chicago	6,145,508
Indianapolis	Indiana	Chicago	10,632,139
Knoxville	Southern States*	Washington	5,482,107
Louisville	Kentucky	Chicago	4,027,711
Milwaukee	Minnesota, N. & S. Dakota, Wisconsin	Chicago	5,968,320
New York	East New York, East New Jersey	New York City	5,647,834
Philadelphia	East Pennsylvania, West New Jersey	Philadelphia	6,036,486
Pittsburg	West Pennsylvania	Philadelphia	5,109,788
San Francisco	Pacific Coast	San Francisco	1,578,935
Topeka	Colorado, Kansas, Missouri, New Mexico	Chicago	10,732,710
Washington	Delaware, Maryland, Virginia, W. Virginia†	Washington	9,016,769
Total			$118,435,827

*Excepting the States in the Louisville and Washington districts. †Also the District of Columbia and foreign countries. The expenses of pension agencies in disbursing the pension fund during the fiscal year were $1,569,787. This is independent of the expense of maintaining the pension bureau at Washington.

PENSIONERS IN EACH STATE AND TERRITORY.

Alabama	2,065	Indian Ter.	1,022	Nevada	166	Tennessee	12,214
Alaska	14	Iowa	28,430	N. Hampsh'r	7,707	Texas	5,270
Arizona	289	Kansas	29,421	New Jersey	13,375	Utah Ter.	544
Arkansas	5,994	Kentucky	21,141	New Mexico	450	Vermont	8,566
California	8,004	Louisiana	1,788	New York	60,325	Virginia	5,256
Colorado	3,381	Maine	17,610	N. Carolina	2,497	Washington	2,885
Connecticut	8,713	Maryland	7,867	N. Dakota	977	W. Virginia	9,787
Delaware	1,764	Mass	25,953	Ohio	75,498	Wisconsin	20,909
Dist. of Col.	6,132	Michigan	31,447	Oklahoma	1,387	Wyoming	364
Florida	1,343	Minnesota	10,873	Oregon	2,263	Foreign coun	2,646
Georgia	1,671	Mississippi	1,641	Penn'a	03,986		
Idaho	537	Missouri	33,135	R'd Island	2,889	Total	676,160
Illinois	49,711	Montana	792	S Carolina	814		
Indiana	55,704	Nebraska	12,011	S Dakota	3,572		

The oldest pensioner on the rolls, June 30, 1891, was Mrs. Anne Hyde, of Fishkill, N. Y., aged 102 years.

HISTORICAL
AND
CHRONOLOGICAL
UNITED STATES

FROM 986

CHRONOLOGY
GEOGRAPHY
HISTORY

TO 1891

DESIGNED TO SIMPLIFY THE STUDY OF HISTORY.

AND AS A

VALUABLE AID IN GIVING A CLEAR, RAPID, CONDENSED COURSE OF PRACTICAL
INSTRUCTION IN THE HISTORY OF OUR OWN COUNTRY, ENABLING ONE
THROUGH THE MEDIUM OF THE EYE, TO READILY

LOCATE FACTS OF HISTORY

AND FIX THEM CLEARLY IN THE MEMORY.

Copyright secured

PERIOD I. 1491 TO 1606. 116 YEARS.

DISCOVERY.

Discoveries before 1492.

9th century. Northmen at Iceland.

986. Eric the Red, at Greenland.

Later. Biörn and Lief at Newfoundland.

1000. Vinland.—Supposed to be southeast coast of New England

Note.—Historians differ regarding the authenticity of the above events.

PERIOD 1.

1491 *Report of committee unfavorable to Columbus' scheme.

1492 *Columbus received a patent from Ferdinand and Isabella, of Spain.—April 17.

COLUMBUS discovered America, at San Salvador, one of the Bahamas.—October 12.

1493 Columbus discovered Jamaica and other islands.—Second voyage

1497 CABOTS discovered the continent at Labrador.—June 24.

1498 Columbus discovered South America at the mouth of the Orinoco.—Third voyage.—August 1.

*Vasco da Gama first doubled the Cape of Good Hope.—India.

1499 Amerigo Vespucci, after whom America was named, visited South America.

1500 Cortereal, of Portugal, seeking India, explored coast of Labrador.

1502 Columbus explored coast in Gulf of Mexico.—Fourth voyage.

1506 *Death of Columbus.—May 20.

1509 *Accession of Henry VIII to the throne of England.—April 21.

1511 Havana, Cuba, settled by Velasquez.

1512 PONCE DE LEON discovered and named Florida.—March 27.

(Ponce de Leon in search of Fountain of Immortal Youth.)

1513 Balboa discovered the Pacific Ocean.—Called it the South Sea.

1517 Cordova discovered Mexico.

1519 *Expedition of Cortez against Mexico.

1520 MAGELLAN, a Portuguese, in the service of Spain, explored the Straits of Magellan.—Named the Pacific Ocean.

De Ayllon's expedition to Carolina.—Called it Chicora.

1521 CORTEZ conquered Montezuma in Mexico.—New Spain.

1522 *First circumnavigation of the globe by Magellan's ship.

1524 VERRAZZANO explored the coast from Carolina to Newfoundland.—New France.

English Sovereigns. Tudors:—1485.—Henry VII, 24 years.

1500

1509.—Henry VIII, 38 years.

1525

1528 Expedition of Narvaez to Florida.—4 survivors reached Mexico.

1531 Pizarro in Peru put to death the Inca.—Lima founded.

1534 Cartier, under Roberval, explored Gulf and River St. Lawrence.

1539 DE SOTO'S expedition to Florida.—10 vessels, 600 men.

1541 De Soto discovered the Mississippi River.—Died in 1542.

Coronado explored the country about the Upper Rio Grande.

1542 Cabrillo, a Portuguese in the service of Spain, explored coast of California.

1547 *Accession of Edward VI to the throne of England.—January 28.

1553 *Accession of Mary I to throne of England.—July 6.

1558 *Accession of Elizabeth to the throne of England.—November 17.

1562 Huguenots.—Coligny sent Ribault to South Carolina.—Port Royal entrance.

1564 Huguenots.—Laudonniere settled on St. John's River, Florida.

1565 Menendez destroyed Huguenots on St. John's River, Florida.

ST. AUGUSTINE, Florida, founded by Menendez.—Oldest European town in the United States.—August 29.

1568 *Spanish prisoners hung by De Gourges on the site of the Menendez massacre.

1576 Frobisher, seeking route to India, cruised about Newfoundland.

1579 Sir Francis Drake explored the Pacific Coast.—New Albion.

(Sir Francis Drake the first Englishman to circumnavigate the globe.)

1582 *Calendar of Pope Gregory XIII.—October 5 made October 15.

Sante Fe, N. M., founded by Espejo.—Second oldest European town in the United States.

1583 Sir Humphrey Gilbert attempted the settlement of Newfoundland.

1584 SIR WALTER RALEIGH sent Amidas and Barlow to explore the coast of Carolina.

(Virginia named in honor of Elizabeth, the virgin queen.)

1585 Raleigh's second expedition.—Grenville attempted to settle Roanoke Island.

1587 Raleigh's third expedition.—John White attempted to settle Roanoke Island.

(Virginia Dare, the first white child born in America.)

1602 Gosnold explored the Southeast coast of New England.—Named Cape Cod.

1603 *Accession of James I to the throne of Great Britain.—March 24.

Champlain explored the coast of Newfoundland.

1605 Port Royal, N. S. (now Annapolis), settled under DeMonts.—Acadia.

(Port Royal, the first permanent French settlement in America.)

1606 JAMES I chartered the London Company.—South Virginia, 34° to 38° lat., and from ocean to ocean.—Also Plymouth Company.—North Virginia, 41° to 45° lat.—April 10.

(Both companies had jurisdiction from 38° to 41° lat.)

Edward VI, 6 years.—1547.

1550

1553.—Mary I, 6 years.

1558.—Elizabeth, 45 years.

1575

1600

Stuarts: 1603.—James I, 22 years.

*Not on the map.

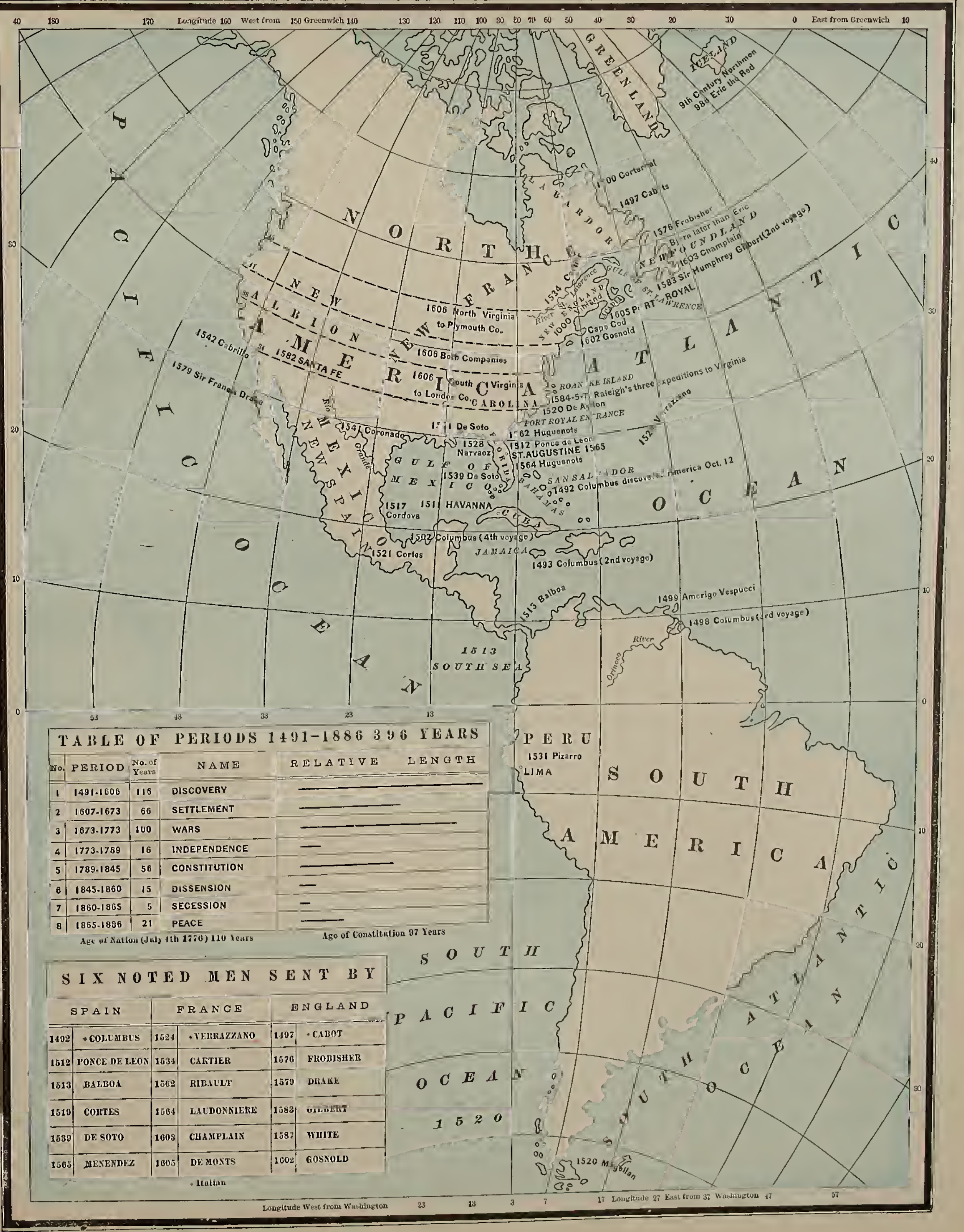

Longitude 160 West from 150 Greenwich 140
East from Greenwich
GREENLAND
ICELAND
9th Century Northmen
986 Eric the Red
1500 Corterreal
1497 Cabots
LABRADOR
1576 Frobisher
Bjorn later than Eric
NEWFOUNDLAND
1603 Champlain
1583 Sir Humphrey Gilbert (2nd voyage)
1534 Cartier
GULF OF ST. LAWRENCE
River St. Lawrence
NEW ENGLAND
1000 Vinland
ACADIA
1605 PORT ROYAL
Cape Cod
1602 Gosnold
NORTH AMERICA
NEW FRANCE
NEW ALBION
1606 North Virginia to Plymouth Co.
1606 Both Companies
1606 South Virginia to London Co.
CAROLINA
ROANOKE ISLAND
1584-5-7 Raleigh's three expeditions to Virginia
1520 De Ayllon
1524 Verrazano
PORT ROYAL ENTRANCE
1562 Huguenots
1541 De Soto
1541 Coronado
1542 Cabrillo
1579 Sir Francis Drake
1582 SANTA FE
Rio Grande
NEW MEXICO
NEW SPAIN
FLORIDA
1528 Narvaez
1512 Ponce de Leon
ST. AUGUSTINE 1565
1564 Huguenots
SAN SALVADOR
1492 Columbus discovers America Oct. 12
BAHAMAS
GULF OF MEXICO
1539 De Soto
1517 Cordova
1511 HAVANNA
CUBA
1502 Columbus (4th voyage)
JAMAICA
1521 Cortes
1493 Columbus (2nd voyage)
1513 Balboa
1499 Amerigo Vespucci
1498 Columbus (3rd voyage)
Orinoco River
1513 SOUTH SEA
PACIFIC OCEAN
ATLANTIC OCEAN
PERU
1531 Pizarro
LIMA
SOUTH AMERICA
SOUTH ATLANTIC OCEAN
SOUTH PACIFIC OCEAN 1520
1520 Magellan
Longitude West from Washington
Longitude East from Washington

TABLE OF PERIODS 1491-1886 396 YEARS

No.	PERIOD	No. of Years	NAME	RELATIVE LENGTH
1	1491-1606	116	DISCOVERY	————————
2	1607-1673	66	SETTLEMENT	—————
3	1673-1773	100	WARS	———————
4	1773-1789	16	INDEPENDENCE	—
5	1789-1845	56	CONSTITUTION	————
6	1845-1860	15	DISSENSION	—
7	1860-1865	5	SECESSION	–
8	1865-1886	21	PEACE	——

Age of Nation (July 4th 1776) 110 Years

Age of Constitution 97 Years

SIX NOTED MEN SENT BY

SPAIN		FRANCE		ENGLAND	
1492	*COLUMBUS	1524	*VERRAZZANO	1497	*CABOT
1512	PONCE DE LEON	1534	CARTIER	1576	FROBISHER
1513	BALBOA	1562	RIBAULT	1579	DRAKE
1519	CORTES	1564	LAUDONNIERE	1583	GILBERT
1539	DE SOTO	1603	CHAMPLAIN	1587	WHITE
1565	MENENDEZ	1605	DE MONTS	1602	GOSNOLD

*Italian

PERIOD II. 1607 TO 1673. 66 YEARS.

SETTLEMENT.

James I.—Continued.

1607 JAMESTOWN, Va., settled by the London Company.—May 13.

Settlement by the Plymouth Company, at the mouth of the Kennebec, unsuccessful.

1608 Quebec settled by the French, under Champlain.—July 3.

1609 Champlain discovered Lake Champlain.—July.

HENRY HUDSON, in the service of the Dutch, discovered the Hudson River.—September 6.

1610 "Starving Time" in Virginia.—Absence of Captain John Smith.

1613 Pocahontas married Rolfe at Yorktown, Va.—April.

1614 CAPTAIN JOHN SMITH explored coast of and named New England.

New Netherlands granted to the Amsterdam Company.—40° to 45° lat. and sea to sea.—October 11.

New Amsterdam (now New York City) settled by the Dutch.

1615 Fort Orange (now Albany, N. Y.,) settled.

1616 The culture of tobacco began in Virginia.

1619 FIRST REPRESENTATIVE ASSEMBLY in America met at Jamestown, Va.—July 30.

NEGRO SLAVERY introduced at Jamestown by the Dutch.—August.

1620 Great Patent granted to Plymouth Company.—40° to 48° lat. and ocean to ocean.—November 3.

PLYMOUTH, Mass., settled by the Puritans.—December 11.

(Compact signed on the Mayflower before landing.—November 11.)

1621 Treaty with Massasoit, chief of the Wampanoags.—Fifty years' peace.—March 22.

1622 Gorges and Mason's grant between the Merrimac and Kennebec Rivers.

Opechancanough's War.—First Indian massacre in Virginia.—347 whites killed.—March 22.

1623 Portsmouth and Dover, N. H., settled by Gorges and Mason.

1625 *Accession of Charles I to the throne of Great Britain.—March 27.

1625

1625.—Charles I, 24 years.

1628 Endicott's Grant from the Plymouth Company, from three miles south of the Charles River to three miles north of the Merrimac River, and from ocean to ocean.—March 19.

Salem, Mass., settled by the Massachusetts Bay Company.—Gov. John Endicott.—September 6.

1629 Order of Patroons founded by the Dutch in New Netherlands.

1630 Warwick's Grant, "westward from Narragansett River, 120 miles along the coast, west to the Pacific Ocean."

Boston founded by Winthrop.

1631 *Warwick's Grant transferred to Lords Say, Brooke and others.—March 19.

*Mason named his grant New Hampshire.

*Gorges named his grant Maine.

1632 Maryland granted to Lord Baltimore.

1633 Windsor, Conn., settled by William Holmes, from Plymouth, Mass.

1634 Maryland settled at St. Mary's by Calvert.—March 27.

1636 Providence, R. I., founded by Roger Williams.

1637 Pequot War in Connecticut.—First Indian war in New England.

1638 Delaware settled near Wilmington by Swedes and Finns.—New Sweden.

New Haven, Conn., settled by Eaton and Davenport.—April 18.

HARVARD COLLEGE founded by bequest of John Harvard, at Cambridge, Mass.—September 14.

1639 *First printing press in America, at Cambridge, Mass.—January.

1641 *New Hampshire settlements united to Massachusetts.

1643 United Colonies of New England formed.—May 19.

1644 Second Indian Massacre in Virginia.—300 whites killed.—April 18.

1645 Claiborne's Rebellion in Maryland.—Gov. Calvert fled to Virginia.

1649 *Charles I, King of Great Britain, beheaded.—January 30.

1649

1650 First Settlement in North Carolina, on the Chowan River, near Edenton.

1650

Commonwealth: 1649—Cromwells, 11 years.

1653 *Oliver Cromwell appointed Lord Protector of Great Britain.—December 16.

1655 Religious War in Maryland between Protestants and Catholics.

New Sweden conquered by the Dutch.

1656 Quakers came to Massachusetts.—Cruel treatment by Puritans.

1660 *Monarchy restored in Great Britain.—Charles II as King.—May 29.

Stuarts Restored: 1660.—Charles II, 25 years.

*Navigation acts passed restricting colonial trade.

1663 Clarendon Grant to Lord Clarendon and others.—March 24.

(This grant extended from 30° to 36° lat. and ocean to ocean.)

Charter of Rhode Island, giving religious liberties, granted.—July 8.

1664 NEW NETHERLANDS granted to the Duke of York and Albany.—March 12.

New Jersey granted to Berkeley and Carteret.—June 24.

Stuyvesant surrendered New Amsterdam (New York City).

Fort Orange, N. Y., named Albany.—September 24.

Elizabeth, N. J., settled by emigrants from Long Island.

1665 Connecticut and New Haven united under the name of Connecticut.—May.

Second charter of Carolina.—Boundary extended to 29° lat.—June 30.

Clarendon Colony, near Wilmington, N. C., permanently settled.

1670 Detroit, Mich., settled by the French.

Carteret Colony settled on Ashley River near Charleston, S. C.

1671 Marquette established the mission of St. Ignatius, at Michilimackinac.

1673 Virginia granted to Culpepper and Arlington.

THE EIGHT INDIAN FAMILIES.

Algonquins, Iroquois, Dakotas or Sioux, Catawbas, Cherokees, Uchees, Choctaws or Mobilians, and Natchez.

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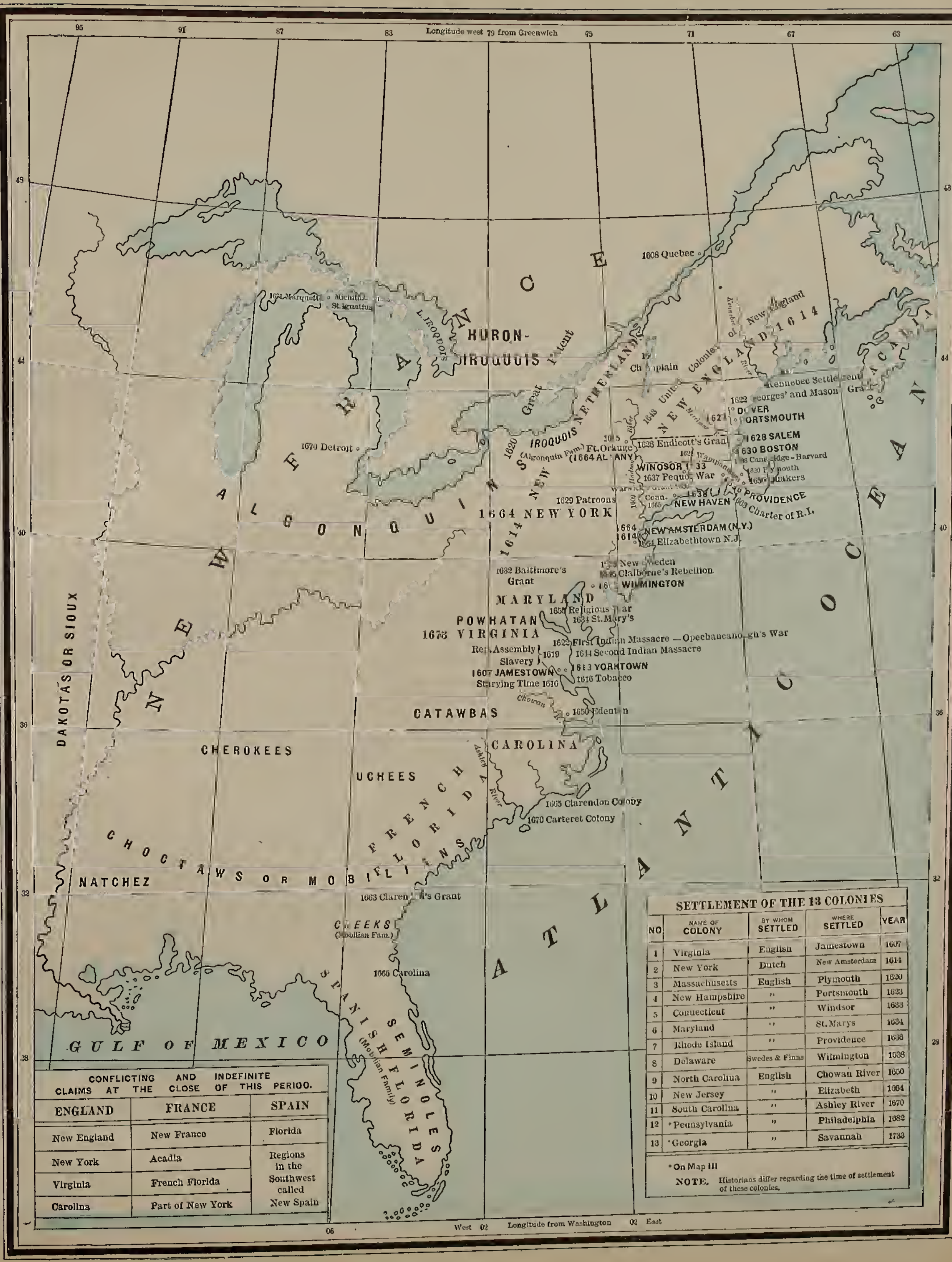
* Not on the map.


Longitude west 79 from Greenwich
95
91
87
83
75
71
67
63
48
44
40
36
32
28
N E W F R A N C E
A L G O N Q U I N S
HURON-IROQUOIS
IROQUOIS
(Algonquin Fam.)
DAKOTAS OR SIOUX
1608 Quebec
1671 Marquette
Michilimackinac
St. Ignatius
IROQUOIS
1670 Detroit
Great Patent
1620 NEW NETHERLAND
1614 NEW
Champlain
United Colonies of New England
1643
NEW ENGLAND 1614
Kennebec River
Merrimac R.
Kennebec Settlement
1622 Georges' and Mason Grant
DOVER
1623 PORTSMOUTH
1628 SALEM
1630 BOSTON
1638 Cambridge-Harvard
1620 Plymouth
1656 Quakers
Wampanoags
1628 Endicott's Grant
1615 Ft. Orange
(1664 ALBANY)
Hudson River
WINDSOR 1633
1637 Pequot War
Warwick's Grant
Conn. 1665
1638 NEW HAVEN
PROVIDENCE
1663 Charter of R.I.
1629 Patroons
1664 NEW YORK
1664 NEW AMSTERDAM (N.Y.)
1614
1664 Elizabethtown N.J.
New Sweden
Claiborne's Rebellion
WILMINGTON
1632 Baltimore's Grant
MARYLAND
1655 Religious War
1634 St. Mary's
POWHATAN
1676 VIRGINIA
1622 First Indian Massacre — Opechancanough's War
1644 Second Indian Massacre
Rep. Assembly
Slavery
1619
1607 JAMESTOWN
Starving Time 1610
1613 YORKTOWN
1616 Tobacco
Chowan R.
1650 Edenton
CATAWBAS
CAROLINA
Ashley River
1665 Clarendon Colony
1670 Carteret Colony
CHEROKEES
UCHEES
FRENCH FLORIDA
CHOCTAWS OR MOBILIANS
NATCHEZ
1663 Clarendon's Grant
CREEKS (Mobilian Fam.)
1665 Carolina
SPANISH FLORIDA
SEMINOLES (Mobilian Family)
GULF OF MEXICO
ATLANTIC OCEAN
ACADIA
West 02 Longitude from Washington 02 East
06

CONFLICTING AND INDEFINITE CLAIMS AT THE CLOSE OF THIS PERIOD.

ENGLAND	FRANCE	SPAIN
New England	New France	Florida
New York	Acadia	Regions in the Southwest called New Spain
Virginia	French Florida	
Carolina	Part of New York	

SETTLEMENT OF THE 13 COLONIES

NO	NAME OF COLONY	BY WHOM SETTLED	WHERE SETTLED	YEAR
1	Virginia	English	Jamestown	1607
2	New York	Dutch	New Amsterdam	1614
3	Massachusetts	English	Plymouth	1620
4	New Hampshire	"	Portsmouth	1623
5	Connecticut	"	Windsor	1633
6	Maryland	"	St. Marys	1634
7	Rhode Island	"	Providence	1636
8	Delaware	Swedes & Finns	Wilmington	1638
9	North Carolina	English	Chowan River	1650
10	New Jersey	"	Elizabeth	1664
11	South Carolina	"	Ashley River	1670
12	* Pennsylvania	"	Philadelphia	1682
13	* Georgia	"	Savannah	1733

* On Map III

NOTE. Historians differ regarding the time of settlement of these colonies.

PERIOD III. 1673 TO 1773. 100 YEARS.

WARS.

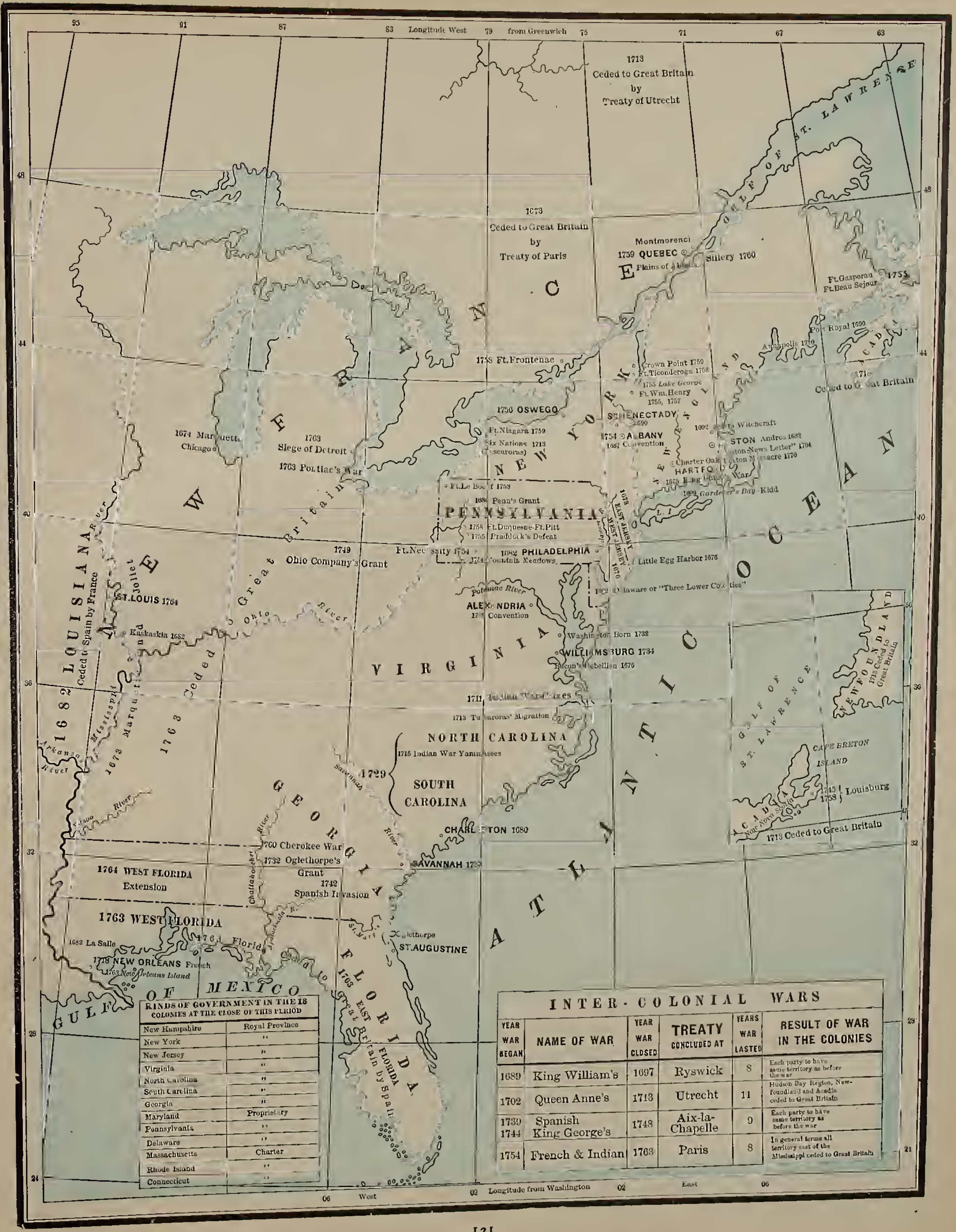
1673 Marquette and Joliet explore the Mississippi River to the Arkansas.
1674 Marquette founded Missionary Station at Chicago, Ill.
1675 Marquette founded a mission at Kaskaskia, Ill.
King Philip's War in New England began.
1676 BACON'S REBELLION against Berkeley, in Virginia.—100 years before independence.
Quinquepartite Deed formed East and West Jersey —West to the Quakers and east to Carteret.—Dividing line from Little Egg Harbor to lat. 41° 40′ on the northernmost branch of the Delaware River.
1680 Charleston, S. C., founded by the removal of the Carteret Colony.
1681 Pennsylvania granted to William Penn, by Charles II.—March 4.
1682 La Salle explored the Mississippi to its mouth.—Named Louisiana.
Delaware (" the three lower counties ") granted to William Penn.—August 24.
PHILADELPHIA founded by William Penn.
1684 *Massachusetts' charter declared null and void by English court.—June 18.
1685 *Accession of James II to the throne of Great Britain.—February 6.
1686 Arrival of Sir Edmund Andros, Governor of all New England.—December 20.
1687 Charter of Connecticut concealed in the Charter Oak at Hartford.—October 31.
1689 *Accession of William III and Mary II to the throne of Great Britain.—February 13.
*KING WILLIAM'S WAR between Great Britain and France.—Lasted 8 years.
1690 Burning of Schenectady, N. Y., by French and Indians.—Feb. 9.
Port Royal taken by the British under Phipps.—May.
1691 *Massachusetts, Plymouth, Maine and Nova Scotia united.—Gov. Phipps.—October 7.
1692 Phipps' witchcraft court at Salem, Mass.
(Twenty persons convicted of witchcraft and put to death.)
1694 *Death of Mary II, Queen of Great Britain.—December 28.
1697 *Treaty of Ryswick closed King William's War.—No change in territory.—October 30.
1699 Captain William Kidd, the pirate, at Gardener's Bay, Long Island.
1702 *Accession of Anne to the throne of Great Britain.—March 8.
*QUEEN ANNE'S WAR began.—Great Britain against France and Spain.—Lasted 11 years.
1704 First permanent newspaper in America, the " Boston News Letter."—April 24.
1710 Port Royal, N. S., captured by the British and named Annapolis.—October 2.
1711 Indian war with the Corees in North Carolina.
1713 Tuscaroras join the Iroquois in New York, making the Six Nations.
*TREATY OF UTRECHT closed Queen Anne's War.—April 11.
(This treaty gave Great Britain the Hudson Bay region, Newfoundland and Acadia.)
1714 *Accession of George I to the throne of Great Britain.—August 1.
1715 Yammassee War in Carolina.
1718 New Orleans founded by the French under Bienville.
1727 *Accession of George II to the throne of Great Britain.—June 11.
1729 Carolina divided.—Clarendon, or middle colony, moved to Charleston.
(Albemarle Colony became North Carolina.
(Carteret Colony became South Carolina.)
1732 Washington born in Westmoreland County, Va.—February 22.
Georgia granted to Oglethorpe.–Included part of Carolina.—June 9.
1733 Savannah, Ga., founded by Oglethorpe.—February 12.
1739 *SPANISH WAR between Great Britain and Spain declared.—October 23.
(This with King George's war lasted 9 years.)
1740 Invasion of Florida by Oglethorpe.
1742 Invasion of Georgia by the Spanish.
1744 *SPANISH WAR merged into KING GEORGE'S WAR.—France allied with Spain.

1673
Charles II.—Continued.
1685.—James II.—3 years.
1688.—Revolution.
1689.—William and Mary.—6 years.
1695.—William.—7 years.
1700
1702.—Anne.—12 years.
BRUNSWICKS:
1714.—George I.—13 years.
1725
1727.—George II.—33 years.

1745 Louisburg, the Gibraltar of America, captured by Pepperell.—June 17.
1748 *Treaty of Aix la Chapelle closed King George's War.—October 18.
(Both parties to restore their respective conquests.)
1749 Ohio Company, of London, received a grant of 6,000,000 acres on Ohio River.
1751 *New Style Gregorian Calendar adopted by Great Britain.—11 days cut, September 3 to 14.
1753 Washington sent to Ft. Le Bœuf by Gov. Dinwiddie of Virginia.
1754 Washington returned to Williamsburg.—January 6.
*FRENCH AND INDIAN WAR.—Most important of the colonial wars.
Washington defeated Jumonville at Mountain Meadows.—May 28.
Albany Convention adopted plan of union prepared by Franklin.—June 19.
(Plan rejected by the crown and people.)
Washington defeated at Ft. Necessity by De Villiers.—June 3.
1755 Alexandria Convention, Va.—Colonial governors met Braddock.—April 14.
Ft. Beau Sejour, N. S., surrendered to the British.—June 16.
Ft. Gaspereau surrendered to the British.—June 17.
BRADDOCK'S DEFEAT on the Monongahela River, Pa.—Braddock mortally wounded.—July 9.
Battle of Lake George.—Lyman under Johnson defeated Dieskau.—September 8.
Johnson established Ft. William Henry.—Received a baronetcy and £5,000.
1756 *War Declared by Great Britain after two years' fighting.—May 18.
Montcalm captured Oswego, 1,400 men, stores and money.—Aug. 14.
1757 Ft. William Henry surrendered to Montcalm.—August 9.
(Massacre by Indians after Monroe capitulated.)
1758 Lord Howe killed in a fight near Ticonderoga.—July 6.
Abercrombie repulsed by Montcalm at Ticonderoga.—July 8.
Louisburg, N. S., taken by Amherst and Boscawen.—July 26.
Ft. Frontenac (now Kingston, Ca.), surrendered to Bradstreet.—August 27.
Grant defeated by Aubrey at Ft. Duquesne.—September 21.
Ft. Duquesne, Pa., captured by Forbes.—Named Ft. Pitt.—Nov. 25.
1759 Ft. Niagara surrendered to Johnson.—Death of Prideaux.—July 25.
Battle of Montmorenci, near Quebec.—Montcalm repulsed Wolfe.—July 31.
Crown Point, N. Y., taken by Amherst.—August 4.
PLAINS OF ABRAHAM, QUEBEC.—Wolfe and Montcalm mortally wounded.—September 13.
Quebec surrendered to the British.—September 18.
1760 Cherokee War in Georgia.
Battle of Sillery. Ca.—Dr. Levi attempts to recover Quebec.—Apr. 28.
*Accession of George III to the throne of Great Britain.—Oct. 25.
1762 Louisiana ceded to Spain by France.
*Pontiac's conspiracy to unite the Indian nations.
1763 *TREATY OF PARIS closed the French and Indian War.—Feb. 10.
(Practically all territory east of the Mississippi River ceded by France to Great Britain.—Two Islands near Newfoundland and island and town of New Orleans retained by France.)
Florida ceded to Great Britain by Spain, treaty of Paris —Feb. 10.
East and West Florida established by George III.—October 7.
Pontiac's War broke out.—Ottawas.
Siege of Detroit by the Indians unsuccessful.—May.
1764 St. Louis, Mo., settled by the French.
West Florida extended to the mouth of the Yazoo.—June 6.
*ENGLISH DEBT greatly increased by French and Indian War.
1765 *Stamp Act passed by Parliament.—March 22.
1766 *Stamp Act repealed.—March 19.
1767 *Bill imposing a tax on glass, paper, etc., passed.—June 29.
1770 The Boston Massacre.—March 5.
*All duties except on tea repealed by Parliament.—April 12.

1750
1760.—George III.—60 years.

*Not on the map.


Longitude West from Greenwich
95
91
87
83
79
75
71
67
63
48
44
40
36
32
28
24
1713
Ceded to Great Britain
by
Treaty of Utrecht
GULF OF ST. LAWRENCE
1763
Ceded to Great Britain
by
Treaty of Paris
NEW FRANCE
Montmorenci
1759 QUEBEC
Plains of Abraham
Sillery 1760
Ft.Gasperau
Ft.Beau Sejour
1755
Port Royal 1690
Annapolis 1710
ACADIA
1713
Ceded to Great Britain
1758 Ft.Frontenac
Crown Point 1759
Ft.Ticonderoga 1758
1755 Lake George
Ft.Wm.Henry
1755, 1757
NEW ENGLAND
1756 OSWEGO
SCHENECTADY
1690
Ft.Niagara 1759
Six Nations 1713
(Tuscaroras)
1754 ALBANY
1687 Convention
1692 Witchcraft
BOSTON Andros 1682
Boston "News Letter" 1704
Boston Massacre 1770
Charter Oak
HARTFORD
1675 King Philip's War
1699 Gardener's Bay - Kidd
L. I.
NEW YORK
1674 Marquette
Chicago
1763
Siege of Detroit
1763 Pontiac's War
Ft.Le Boeuf 1753
1681 Penn's Grant
PENNSYLVANIA
1758 Ft.Duquesne-Ft.Pitt
1755 Braddock's Defeat
1673
EAST JERSEY
WEST JERSEY
1676
Delaware R.
1749
Ohio Company's Grant
Ft.Necessity 1754
1754 Fountain Meadows
1682 PHILADELPHIA
Little Egg Harbor 1676
1682 Delaware or "Three Lower Counties"
Potomac River
ALEXANDRIA
1755 Convention
Washington Born 1732
WILLIAMSBURG 1734
Bacon's Rebellion 1676
VIRGINIA
1711 Indian War Tuscaroras
1713 Tuscaroras' Migration
NORTH CAROLINA
1715 Indian War Yamassees
1729
SOUTH
CAROLINA
CHARLESTON 1680
1682
LOUISIANA
Ceded to Spain by France
Joliet
ST.LOUIS 1764
Kaskaskia 1682
Mississippi River
Marquette and
1673
Ceded
1763
Great Britain
Ohio River
Arkansas River
Yazoo River
Savannah River
GEORGIA
1760 Cherokee War
1732 Oglethorpe's
Grant
1742
Spanish Invasion
SAVANNAH 1733
Chattahoochee River
Apalachicola R.
St. Mary's R.
1764 WEST FLORIDA
Extension
1763 WEST FLORIDA
1763 Florida
1682 La Salle
1718 NEW ORLEANS French
1763 New Orleans Island
Oglethorpe
ST.AUGUSTINE
EAST FLORIDA
1763 Ceded to Great Britain by Spain
FLORIDA
GULF OF MEXICO
ATLANTIC OCEAN
GULF OF ST. LAWRENCE
NEWFOUNDLAND
1713 Ceded to Great Britain
CAPE BRETON
ISLAND
1745
1758
Louisburg
ACADIA
Now Nova Scotia
1713 Ceded to Great Britain
Longitude from Washington
West
East
06
02

KINDS OF GOVERNMENT IN THE 13 COLONIES AT THE CLOSE OF THIS PERIOD	
New Hampshire	Royal Province
New York	"
New Jersey	"
Virginia	"
North Carolina	"
South Carolina	"
Georgia	"
Maryland	Proprietary
Pennsylvania	"
Delaware	"
Massachusetts	Charter
Rhode Island	"
Connecticut	"

INTER-COLONIAL WARS

YEAR WAR BEGAN	NAME OF WAR	YEAR WAR CLOSED	TREATY CONCLUDED AT	YEARS WAR LASTED	RESULT OF WAR IN THE COLONIES
1689	King William's	1697	Ryswick	8	Each party to have same territory as before the war
1702	Queen Anne's	1713	Utrecht	11	Hudson Bay Region, Newfoundland and Acadia ceded to Great Britain
1739 1744	Spanish King George's	1748	Aix-la-Chapelle	9	Each party to have same territory as before the war
1754	French & Indian	1763	Paris	8	In general terms all territory east of the Mississippi ceded to Great Britain

PERIOD IV. 1773 TO 1789. 16 YEARS.

INDEPENDENCE.

1773 "Boston Tea Party."—Three cargoes of tea destroyed.—December 16.
1774 *Boston Port Bill enacted.—March 25.
Green Mountain Boys' Rebellion, led by Ethan Allen.
*First Continental Congress met at Philadelphia.—September 5.
*Declaration of rights passed by Congress.—October 14.

1775 BATTLE OF LEXINGTON, Mass.—First blood of the Revolutionary War.—April 19.
Allen and Arnold capture Ticonderoga, N. Y.—May 10.
*Continental Congress met at Philadelphia.—May 10.
Americans capture Crown Point, N. Y.—May 12.
A declaration of independence at Charlotte, Mecklenburgh County, N. C.—May 20.
*Howe, Clinton and Burgoyne arrived at Boston.—May 25.
*Washington elected Commander-in-Chief.—June 15.

BATTLE OF BUNKER HILL.—Death of Gen. Joseph Warren.—June 17.
Montreal surrendered to Montgomery.—November 12.
Battle of Quebec.—Death of Montgomery.—December 31.

1776 Norfolk destroyed by Lord Dunmore.—January 1.
*Boston evacuated by British troops.—March 18.
*Resolution for independence offered by Richard Henry Lee.—June 7.
Clinton attacked Col. Moultrie at Sullivan's Island, S. C.—June 28.

DECLARATION OF INDEPENDENCE at Philadelphia.—July 4.—(Thomas Jefferson supposed to be the author.)
Battle of Long Island, N. Y.—Putnam against Howe.—August 27.
*New York City abandoned by the Americans.—September 15.
Battle of White Plains, N. Y.—Howe defeated Washington.—October 28.
Fort Washington captured by Gen. Howe.—November 16.
Fort Lee captured by Cornwallis.—November 20.
*Washington's Retreat through New Jersey.—December.
*General Lee captured in New York by British scouts.—December 13.

BATTLE OF TRENTON, N. J.—Washington captured 1,000 Hessians.—December 26.

1777 Battle of Princeton, N. J.—Cornwallis lost 1,000 men.—January 3.
Tryon's first expedition against Connecticut.—Danbury burned.—April.
Battle of Ridgefield, Conn.—Arnold's bravery.—Wooster's death.—April 27.
Meigs' expedition against the British at Sag Harbor, Long Island.—May 23.
*National flag with 13 stars and stripes, adopted by Congress.—June 4.
Lafayette, DeKalb and party arrive at Georgetown, S. C.—June 15.
Ticonderoga abandoned by the Americans.—July 6.
Battle of Hubbardton, Vt.—Americans defeated.—July 7.
Fort Schuyler besieged by St. Leger.—August.
Battle of Oriskany, N. Y.—Death of Gen. Herkimer.—August 6.
Battle of Bennington, Vt.—Americans successful.—August 16.
Battle of Brandywine or Chad's Ford, Pa.—Washington and Howe.—September 11.
First Battle of Stillwater, or Bemis' Heights.—September 19.
Battle of Paoli, Pa.—Midnight defeat of Wayne.—September 21.
Philadelphia entered by the British under Howe.—September 26.
Battle of Germantown, Pa.—Washington lost 1,000 men.—October 4.
Fts. Clinton and Montgomery, posts in the Highlands, N. Y., captured.—October 6.
Second Battle of Stillwater, or Saratoga.—American victory.—Oct. 7.

SURRENDER OF BURGOYNE to Gates, near Saratoga, N. Y.—October 17.
(This surrender the pivotal event of the war.)
Hessians repulsed at Ft. Mercer, N. J.—October 22.
*Articles of Confederation adopted by Congress.—November 15.
Ft. Mifflin abandoned by Americans.—November 16.

VALLEY FORGE, Pa.—American army encamped.—December 19.

1778 *Independence of the United States acknowledged by France.—Jan. 16.
*Treaty of Alliance with France signed at Paris.—February 6.
Ohio settled at Marietta by a Colony under Rufus Putnam.—April 7.
*British Peace Commission arrived at Philadelphia.—May 31.
*Philadelphia evacuated by Clinton, successor of Howe.—June 18.
Battle of Monmouth Court-house, N. J.—Clinton retreated to New York.—June 28.
Wyoming Massacre, Pa., by Tories and Indians.—July 3.
*Articles of Confederation adopted by Congress.—July 9.
Battle of Rhode Island, near Quaker Hill.—August 29.
Cherry Valley Massacre, N. Y., by Butler and Brandt.—November 11.
Battle of Savannah.—City captured by the British.—December 29.

1779 Sunbury captured by the British, last American post in Georgia.—January 6.
Battle of Kettle Creek, Ga.—Defeat and death of Col. Boyd (British).—February 14.
Battle of Brier Creek, Ga.—Prevost defeated Ashe.—March 3.
Stony Point and Verplanck's Point, N. Y., captured by the British.—June 1.

George III. 1775 Continued.

*Spain declared war against Great Britain.—June 16.
Stone Ferry, S. C., Americans repulsed.—June 20.
Tryon's expedition against Connecticut.—New Haven plundered.—July.
STONY POINT, N. Y., captured by Wayne.—July 16.
Battle of Penobscot, Me.—Americans defeated by British fleet.—July 25.
British surprised at Paulus Hook (now Jersey City), N. J., by Lee.—August 19.
Sullivan's Expedition against the Indians in New York.—August.
Battle of Chemung Creek, near Elmira, N. Y.—August 29.
Savannah besieged by French and Indians.—September-October.
*John Paul Jones captured two frigates off the northeastern coast of England.—September 23.
D'Estang and Lincoln repulsed at Savannah, Ga.—October 9.

1780 Clinton and Arbuthnot besieged Charleston, S. C.—March 19.
Battle of Monk's Corner, S. C.—Tarleton defeated Americans.—April 14.
Surrender of Charleston, S. C., to the British by Lincoln.—May 12.
Tarleton massacred 400 Americans at the Waxhaws, S. C.—May 29.
Battle of Springfield, N. J.—Knyphausen and Greene.—June 23.

ADMIRAL DE TERNAY AND ROCHAMBEAU arrived at Newport, R. I., with 6,000 men.—July 10.
Battle of Rocky Mount, S. C.—American repulse.—July 30.
Battle of Hanging Rock, S. C.—Sumter defeated by the British.—August 6.
Battle of Camden, or Sanders Creek.—Gates lost 1,000 men.—August 16.
Battle of Fishing Creek, S. C.—Sumter defeated by Tarleton.—August 18.

ARNOLD attempted to betray West Point, N. Y., to Sir Henry Clinton.—September 22.
*Andre executed as a spy at Tappan, N. Y.—October 2.
Battle of King's Mountain, N. C.—Ferguson defeated and killed.—October 7.
Battle of Fishdam Ford, S. C.—Sumter defeated Wemys.—November 12.
Battle of Blackstocks, S. C.—Sumter defeated Tarleton.—November 20.

1781 Revolt of American troops at Morristown, N. J.—January 1.
Battle of the Cowpens.—Tarleton defeated by Morgan.—January 17.
Arnold's depredations at Richmond and other points in Virginia.—January.
Retreat of Morgan and Greene through North Carolina to Virginia, pursued by Cornwallis.—February 3-14.
*Ratification of the Articles of Confederation by the States announced.—March 1.

*NEW YORK CESSION to the General Government of territory between Lake Erie and the Cumberland Mountains.—March 1.
(New York the first to cede territory to the United States. She claimed a vast domain covering the Northwest. Not shown on the map.)
Battle of Guilford Court-house, N. C.—Greene repulsed by Cornwallis.—March 15.
Battle of Hobkirk's Hill, or second Camden, S. C.—Greene defeated by Rawdon.—April 25.
Battle of Ft. Ninety-six.—Greene repulsed.—June 18.
*Isaac Hayne executed as a traitor by the British at Charleston, S. C.—August 4.
*Arnold's expedition to Connecticut.—Attempt to divert the attention of Washington.
Battle of Ft. Griswold.—New London, Conn., burned by Arnold.—September 6.
Battle of Eutaw Springs, S. C.—Greene closed the campaign in the Carolinas—September 8.
Siege of Yorktown by Washington and Count de Grasse.—October.
SURRENDER OF CORNWALLIS at Yorktown, Va., with 7,000 men.—Oct. 19.

1782 *Preliminary Articles of Peace signed at Paris.—November 30.

1783 Florida re-ceded to Spain by Great Britain.—January 20.
*Cessation of hostilities proclaimed in the American army.—April 11.

DEFINITIVE TREATY OF PEACE signed at Paris (original territory).—September 3.
Washington resigned his commission at Annapolis, Md.—December 23.
Fitch unsuccessfully applied steam to navigation on the Hudson. (Fitch predicted the present use of steam.)

1784 Virginia Cession of territory to the General Government.—March 1.
Virginia Reserve, between the Little Miami and Scioto Rivers.

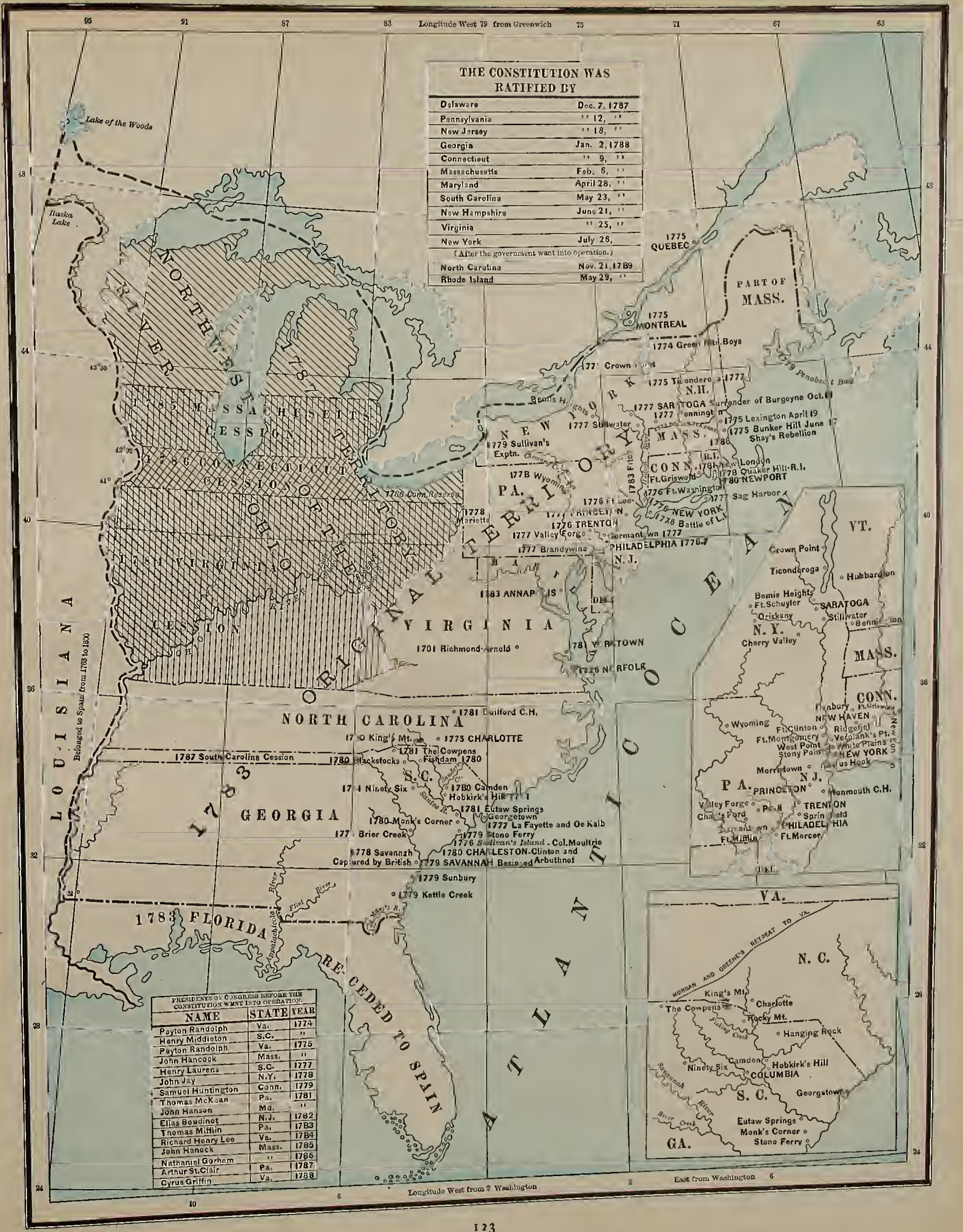
1785 Massachusetts Cession of territory to the General Government (between parallels 42°2° 2′ and 43° 30′).—April 19.

1786 Connecticut Cession to the General Government (between parallels 41° and 42° 2′).—September 14.
(Western or Connecticut Reserve, from Pennsylvania to a line 120 miles west.)
Shay's Rebellion in Massachusetts.—War-debt troubles.—Paper money demanded.

1787 Territory Northwest of the River Ohio formed by Congress.—July 23.
(The first territorial division formed by the United States.)
South Carolina Cession.—A strip "12 or 14 miles wide" west to the Mississippi River.—August 19.
*Constitution agreed upon by convention at Philadelphia.—September 17.

1788 *Constitution ratified by the requisite number of States.

*Not on the map.



THE CONSTITUTION WAS RATIFIED BY

Delaware	Dec. 7, 1787
Pennsylvania	" 12, "
New Jersey	" 18, "
Georgia	Jan. 2, 1788
Connecticut	" 9, "
Massachusetts	Feb. 6, "
Maryland	April 28, "
South Carolina	May 23, "
New Hampshire	June 21, "
Virginia	" 25, "
New York	July 26,
(After the government went into operation.)	
North Carolina	Nov. 21, 1789
Rhode Island	May 29, "

PRESIDENTS OF CONGRESS BEFORE THE CONSTITUTION WENT INTO OPERATION.

NAME	STATE	YEAR
Peyton Randolph	Va.	1774
Henry Middleton	S.C.	"
Peyton Randolph	Va.	1775
John Hancock	Mass.	"
Henry Laurens	S.C.	1777
John Jay	N.Y.	1778
Samuel Huntington	Conn.	1779
Thomas McKean	Pa.	1781
John Hanson	Md.	"
Elias Boudinot	N.J.	1782
Thomas Mifflin	Pa.	1783
Richard Henry Lee	Va.	1784
John Hanock	Mass.	1785
Nathaniel Gorham	"	1786
Arthur St.Clair	Pa.	1787
Cyrus Griffin	Va.	1788

Longitude West 79 from Greenwich
95
91
87
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44
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36
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28
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Lake of the Woods
Ilaska Lake
NORTHWEST TERRITORY
1787
1785 MASSACHUSETTS CESSION
1786 CONNECTICUT CESSION
1784 VIRGINIA CESSION
OHIO RIVER
1786 Conn. Reserve
1778 Marietta
ORIGINAL TERRITORY
LOUISIANA
Belonged to Spain from 1763 to 1800
1783
1787 South Carolina Cession
NORTH CAROLINA
GEORGIA
1783 FLORIDA RE-CEDED TO SPAIN
ATLANTIC OCEAN
1775 QUEBEC
1775 MONTREAL
PART OF MASS.
1774 Green Mt. Boys
1775 Crown Point
1775 Ticonderoga
1779 Penobscot Bay
1777 SARATOGA Surrender of Burgoyne Oct.
1777 Bennington
1777 Stillwater
Bemis Heights
N.H.
MASS.
1775 Lexington April 19
1775 Bunker Hill June 17
1786 Shay's Rebellion
NEW YORK
1779 Sullivan's Exptn.
PA.
1778 Wyoming
1783 Fitch
CONN.
R.I.
1781 New London
Ft.Griswold
1778 Quaker Hill-R.I.
1780 NEWPORT
1776 Ft.Washington
1777 Sag Harbor
1776 NEW YORK
1776 Battle of L.I.
1776 Ft.Lee
1777 PRINCETON
1776 TRENTON
1777 Valley Forge
Germantown 1777
1777 Brandywine
PHILADELPHIA 1776
N.J.
1783 ANNAPOLIS
DEL.
VIRGINIA
1701 Richmond-Arnold
1781 YORKTOWN
1776 NORFOLK
1781 Guilford C.H.
1780 King's Mt.
1775 CHARLOTTE
1781 The Cowpens
Fishdam 1780
1780 Blackstocks
S.C.
1781 Ninety Six
1780 Camden
Hobkirk's Hill 1781
1781 Eutaw Springs
Georgetown
1777 La Fayette and De Kalb
1780 Monk's Corner
1779 Brier Creek
1779 Stono Ferry
1776 Sullivan's Island - Col.Moultrie
1778 Savannah Captured by British
1780 CHARLESTON-Clinton and Arbuthnot
1779 SAVANNAH Besieged
1779 Sunbury
1779 Kettle Creek
Appalachicola River
Flint River
St. Mary's R.
VT.
Crown Point
Ticonderoga
Hubbardton
Bemis Heights
Ft.Schuyler
Oriskany
SARATOGA
Stillwater
Bennington
N.Y.
Cherry Valley
MASS.
CONN.
Danbury
Ft.Griswold
NEW HAVEN
Wyoming
Ft.Clinton
Ft.Montgomery
Ridgefield
Verplank's Pt.
West Point
Stony Point
White Plains
NEW YORK
Paulus Hook
Morristown
N.J.
PA.
PRINCETON
Monmouth C.H.
Valley Forge
Chadd's Ford
TRENTON
Springfield
Germantown
PHILADELPHIA
Ft.Mifflin
Ft.Mercer
DEL.
VA.
MORGAN AND GREENE'S RETREAT TO VA.
N. C.
King's Mt.
The Cowpens
Charlotte
Rocky Mt.
Fishing Creek
Hanging Rock
Camden
Ninety Six
Hobkirk's Hill
COLUMBIA
Savannah River
S. C.
Georgetown
Brier Creek
GA.
Eutaw Springs
Monk's Corner
Stono Ferry
Longitude West from 2 Washington
East from Washington 6
10
6

PERIOD V. 1789 TO 1845. 56 YEARS.

CONSTITUTION.

1789 FIRST CONGRESS under the Constitution met at New York.—March 4.
*Washington inaugurated President.—April 30.
1790 North Carolina Cession of territory to the General Government.—February 25.
Territory south of the River Ohio formed.—May 26.
District of Columbia located and bounded.—July 10.
Harmer defeated by Little Turtle at Maumee Ford, now Ft. Wayne, Ind.—October 22.
*First Ten Amendments to the Constitution proclaimed in force.—December 15.
1791 Vermont admitted into the Union.—Generally laid down as part of New York.—March 4.
United States Bank established at Philadelphia.—February 25.
St. Clair defeated by the Indians in Ohio.—November 4.
1792 Kentucky admitted into the Union.—June 1.
1793 *Washington began second presidential term.—March 4.
1794 Wayne's campaign against the Indians in Ohio.
Whisky insurrection in Pennsylvania.—Opposition to duties on liquors.
*Jay's Treaty with Great Britain at London.—November 19.
1795 *Wayne's Treaty with the Indians at Greenville, Ohio.—August 8.
*Treaty of Peace with Algiers.—November 28.
1796 Tennessee admitted into the Union.—June 1.
1797 *John Adams inaugurated President.—March 4.
1798 *Eleventh Amendment to the Constitution declared in force.—January 8.
Mississippi Territory formed.—April 7.
*Washington accepted an appointment as general-in-chief.—July 13.
1799 WASHINGTON died at Mt. Vernon, Va., aged 67 years.—December 14.
1800 Indiana Territory formed.—July 4.
Louisiana ceded to France by Spain by secret treaty.—October 1.
SEAT OF GOVERNMENT removed to Washington, D. C.—Congress met November 17.
1801 *Thomas Jefferson inaugurated President.—March 4.
*Tripoli declared war against the United States.—June 10.
Military Academy established at West Point, N. Y.—March 10.
1802 Georgia Cession of territory to the General Government.—April 24.
Ohio admitted into the Union.—November 22.
1803 LOUISIANA ceded to the United States (see also Map VI.) by France for 80,000,000 francs.—April 30.
(By this cession the United States claimed to the present western boundary of Florida.)
1804 *The Philadelphia destroyed by Decatur at Tripoli.—February 16.
Duel between Hamilton and Burr at Hoboken, N. J.—July 11.
*Twelfth Amendment to the Constitution declared in force.—September 25.
Orleans Territory formed. (See also Map VI.)—October 1.
District of Louisiana formed. (Same as Louisiana cession less Orleans Territory. See Map VI.)—October 1.
1805 Louisiana Territory formed. (Same as District of Louisiana. See Map VI.)—March 3.
*Jefferson began second presidential term.—March 4.
*Treaty of peace concluded with Tripoli.—June 4.
Michigan Territory formed.—June 30.
1806 *Bonaparte's Berlin Decree.—November 21.
1807 *British "Orders in Council" requiring goods to land in Great Britain.—January 7.
Aaron Burr tried for treason at Richmond, Va.—Acquitted September 1.
FULTON successfully applied steam to navigation on the Hudson.—September 14.
The Chesapeake attacked by the Leopard off the coast of Virginia.—June 22.
*British "Orders in Council" prohibited trade with France and allies.—November 17.
*Bonaparte's Milan Decree prohibited trade with English colonies.—December 17.
1808 *Bonaparte's Bayonne Decree ordered seizure of United States vessels.—April 17.
1809 *Non-Intercourse Act prohibiting trade with Great Britain and France passed.—February 27.
Illinois Territory formed.—March 1.
*James Madison inaugurated President.—March 4.
1810 *Bonaparte's Rambouillet Decree.—132 American vessels seized and sold.—March 23.
1811 *George, Prince of Wales, appointed regent of Great Britain.—February 3.
BATTLE between the President and Little Belt off Virginia.—May 16.
Battle of Tippecanoe, Ind.—Harrison defeated the Indians.—November 7.
1812 Louisiana admitted into the Union. (See also Map VI.)—April 30.
*WAR WITH GREAT BRITAIN proclaimed by the United States.—June 19.
Hull's Expedition against Ft. Malden, Ca.—July.
Ft. Mackinaw captured by British and Indians.—July 17.
First battle of Brownstown, Mich.—British defeated Van Horn.—August 5.
Second battle of Brownstown, or Mananguа.—Americans victorious.—August 9.
*British sloop Alert taken by the Essex off Newfoundland.—August 13.
HULL'S SURRENDER of the fort and city of Detroit.—August 16.
The Guerriere, a British frigate, captured by the Constitution off Massachusetts.—August 19.
BATTLE OF QUEENSTON, Ca.—Van Rensselaer wounded.—Brock killed.—October 13.
Battle of Lewiston, N. Y.—Cowardly conduct of American militia.—October 13.
British ship Poictiers captured the Frolic and Wasp off North Carolina.—October 18.
*British ship Macedonia captured by the United States off Canary Islands.—October 25.
Missouri Territory formed. (Same as Louisiana Territory. See Map VI.) December 7.
*British frigate Java captured by the Constitution off Bahia, Brazil.—December 29.
1813 Battle of Frenchtown, Mich.—Winchester defeated by Proctor.—January 22.
British brig Peacock captured by the Hornet off Demarara, South America.—February 24.
*Madison began second presidential term.—March 4.
Battle of York, Ca. (now Toronto).—Explosion of British magazine.—April 27.
FT. MEIGS besieged by 2,000 British and Indians under Proctor.—May 1.
(Gen. Clay with 1,200 Kentuckians dispersed besiegers.—May 5.)
Prevost makes an unsuccessful attack on Sackett's Harbor.—May 29.
THE CHESAPEAKE, Captain Lawrence, captured by the Shannon in Massachusetts Bay.—June 1.
Defense of Ft. Stephenson, Ohio (now Lower Sandusky), by Maj. Crogan.—August 3.
*American brig Argus captured by the Pelican in the English Channel.—August 14.

ADMINISTRATIONS:
1789.—Washington, 2 terms.
1797.—John Adams.
1801.—Jefferson, 2 terms.
1809.—Madison, 2 terms.

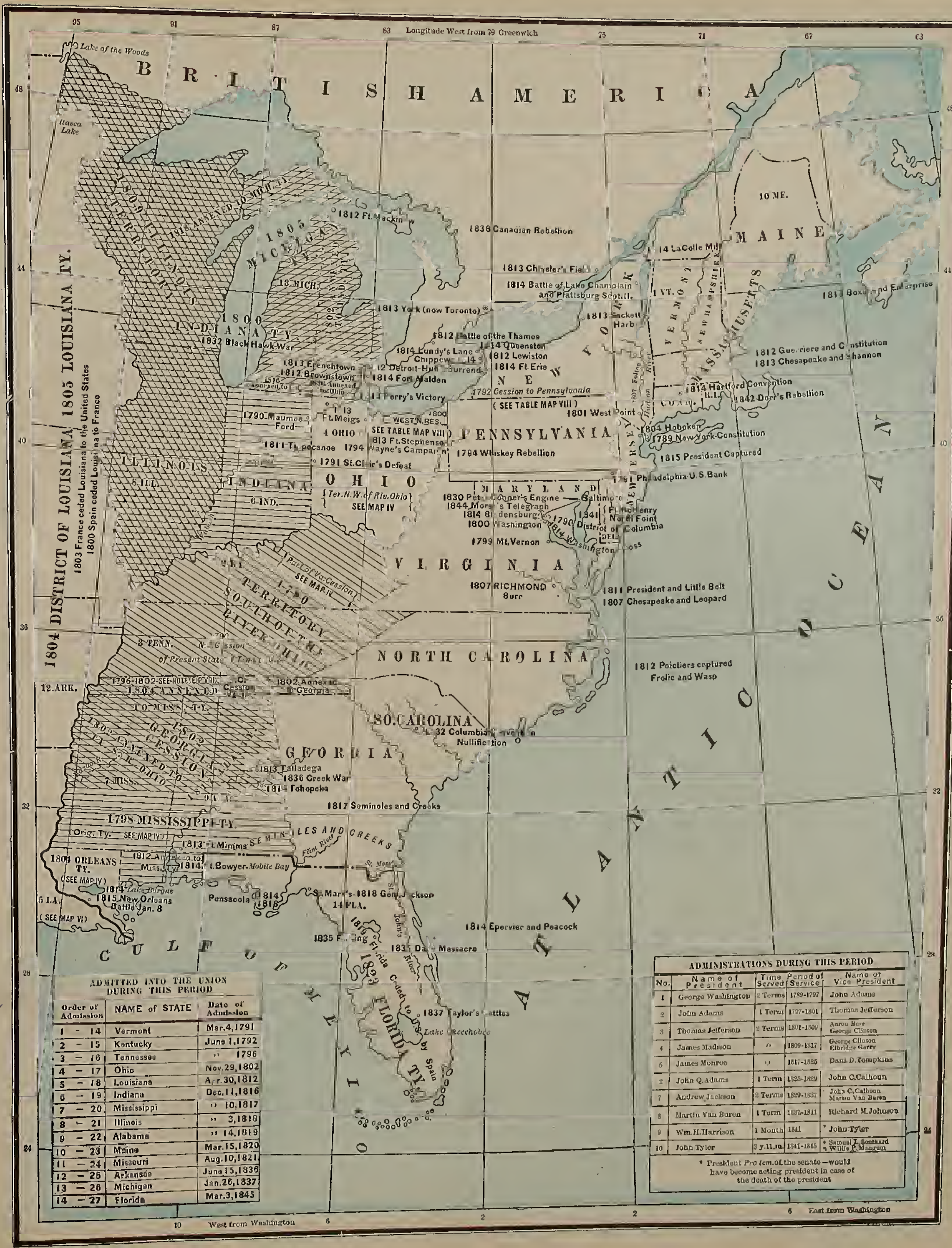
George III.—Continued.
1800
1811.—Prince of Wales Regent.

1813 The Creek War.—Massacre of Ft. Mimms, Ala.—August 30.
British brig Boxer captured by the Enterprise off Maine.—September 5.
PERRY'S VICTORY at the west end of Lake Erie.—September 10.
(Perry, 9 vessels, 54 guns. Barclay, 6 vessels, 63 guns.)
BATTLE OF THE THAMES, or MORAVIAN TOWNS, Ca.—October 5.
(Tecumseh killed and the Indian confederacy broken.)
Battle of Talladega, Ala.—Jackson defeated the Creeks.—November 9.
Battle of Chrysler's Field, Ca.—British repulsed.—November 11.
*Porter made a successful cruise on the Pacific with the Essex.
1814 Battle of Tohopeka, or Horse Shoe Bend, Ala.—[illegible] of the Creek War.—March 27.
*American frigate Essex captured by the Phœbe and Cherub off Chili.—March 28.
Wilkinson repulsed at La Colle Mill, Ca., on the Richelieu River.—March 30.
British brig Epervier captured by the Peacock off Florida.—April 29.
*British sloop Reindeer captured by the Wasp near [illegible] British Channel.—June 28.
Generals Scott and Ripley captured Ft. Erie, Ca.—July [illegible]
Battle of Chippewa, Ca.—Scott defeated Riall.—July 5.
BATTLE OF LUNDY'S LANE, Ca.—The most obstinate of the war.—July 25.
(Drummond, British, and Brown, Scott and Jesup, Americans, wounded.)
First Battle of Ft. Erie.—Drummond with 5,000 men repulsed.—August 15.
Ross dispersed Americans at Bladensburg, Md.—August 24.
Washington, D. C., captured by Ross.—Public buildings burned.—August 24.
BATTLE OF LAKE CHAMPLAIN.—Downie, British, surrendered his fleet to McDonough.—September 11.
BATTLE OF PLATTSBURG, N. Y.—Prevost, British, defeated by McComb.—September 11.
Ross defeated Americans at North Point Md.—Death of Ross.—September 12.
Brooks bombarded Ft. McHenry, Md., without success.—September 13.
British bombarded Ft. Boyer, Mobile Bay, without success.—September 15.
Second Battle of Ft. Erie.—Brown dispersed besiegers.—September 17.
Jackson drove the British from Pensacola, Fla.—November 7.
American Flotilla surrendered to the British at Lake Borgne, La.—December 14.
Convention at Hartford, Conn., opposed to the war.—December 15.
*Battle nine miles from New Orleans, La.—Jackson retired to intrenchments.—December 23.
*TREATY OF GHENT, Belgium (peace), signed.—December 24.
1815 BATTLE OF NEW ORLEANS.—14 days after treaty of peace.—January 8.
(Packenham lost 2,000 men and was killed.—The Americans lost 7 men.)
British squadron captured the frigate President off New Jersey.—Jan. 15.
*British Cyane and Levant captured by Constitution off Madeira Islands.—February 20.
*War against Algiers declared by Congress.—March 3.
*British brig Penguin captured by the Hornet off Brazil.—March 23.
1816 *Bank of the United States re-chartered for 20 years.—Capital $35,000,000.—April 10.
Indiana admitted into the Union.—December 11.
1817 Alabama Territory formed. (Same as present State of Alabama).—March 3.
*James Monroe inaugurated President.—"Era of good feeling."—March 4.
Seminoles and Creeks began depredations in Georgia and Alabama.
Mississippi admitted into the Union.—December 10.
1818 Jackson seized Spanish forts in Florida.
Joint occupation of Oregon by Great Britain and the United States agreed upon.—42° to 54° 40′ latitude. (See Map VI.)
Pensacola, Fla., seized by Jackson.—Spanish officials sent to Cuba.—May 25.
Illinois admitted into the Union.—December 3.
1819 Florida ceded to the United States by Spain.—February 22.
Arkansaw Territory formed. (See Map VI.)—July 4.
Alabama admitted into the Union.—December 14.
1820 *Accession of George IV to the throne of Great Britain.—January 29.
*MISSOURI COMPROMISE passed.—Slavery prohibited north of parallel from south boundary of Missouri to Pacific Ocean, but established in Missouri.—March 3.
Maine admitted into the Union.—March 15.
1821 Mexico became independent of Spain.—(See Map VI.)—February 24.
*Monroe began second presidential term.—March 5.
Missouri admitted into the Union. (See Map VI.)—August 10.
1823 Florida Territory formed.—March 3.
*"Monroe Doctrine" enunciated in the annual message.—December 2.
1824 *Lafayette visited the United States.—August 15.
1825 *John Quincy Adams inaugurated President.—"Era of prosperity."—March 4.
1826 *Death of two ex-Presidents.—Adams and Jefferson.—July 4.
1829 *Andrew Jackson inaugurated President.—March 4.
PARTISAN APPOINTMENTS in the civil service began.
1830 *Accession of William IV to the throne of Great Britain.—June 26.
PETER COOPER'S ENGINE.—B. & O. R. R., the first to transport passengers.—August 28.
1831 *Death of ex-President Monroe.—July 4.
1832 Black Hawk War in Wisconsin and Illinois.
"Nullification" in South Carolina.—Convention met at Columbia.—Oct. 25.
1833 *Jackson began second presidential term.—March 4.
1834 Indian country formed. (See Note Period VI.)—June 30.
1835 *SEMINOLE WAR began in Florida.
Gen. Thompson and others killed at Ft. King, Fla.—December 28.
Major Dade and 100 men massacred in Florida.—December 28.
1836 Texas became independent of Mexico. (See Map VI.)—April 22.
Arkansas admitted into the Union. (See Map VI.)—June 15.
Wisconsin Territory formed. (See Map VI.)—July 3.
Creek War began in Georgia.
1837 Michigan admitted into the Union.—Doubled the original 13.—January 26.
*Martin Van Buren inaugurated President.—March 4.
*Accession of Victoria to the throne of Great Britain.—June 20.
Battle of Okeechobee, Fla.—Taylor defeated the Indians.—December 25.
1838 Canadian rebellion.—Attempt to gain independence.
Iowa Territory formed. (See Map VI.)—July 3.
1841 *William Henry Harrison inaugurated President.—March 4.
*Death of President Harrison.—April 4.
*John Tyler inaugurated President.—April 6.
1842 *Close of the Seminole War.—Peace proclaimed.—August 14.
Dorr's Rebellion in Rhode Island.—Attempt to obtain a constitution.
1844 MORSE'S TELEGRAPH established between Baltimore and Washington.
1845 Florida admitted into the Union.—March 3.
Iowa admitted into the Union. (See Map VI.)—March 3.

1817.—Monroe, 2 terms.
1825.—John Q. Adams.
1829.—Jackson, 2 terms.
1837.—Van Buren.
1841.—Harrison.—Tyler.

1820.—George IV.—10 years.
1830.—William IV.—7 years.
1837.—Victoria.

* Not on the map.


Longitude West from 79 Greenwich
95
91
87
83
75
71
67
63
48
44
40
36
32
28
24
B R I T I S H A M E R I C A
Lake of the Woods
Itasca Lake
1804 DISTRICT OF LOUISIANA 1805 LOUISIANA TY.
1803 France ceded Louisiana to the United States
1800 Spain ceded Louisiana to France
1809 ILLINOIS TERRITORY
1818 ANNEXED TO MICH. TY.
1805 MICHIGAN TY.
13 MICH.
1802 ANNEXED TO IND. TY.
1800 INDIANA TY.
1832 Black Hawk War
1812 Ft. Mackinaw
1838 Canadian Rebellion
1813 Chrysler's Field
1814 Battle of Lake Champlain and Plattsburg Sept. 11.
1813 York (now Toronto)
1813 Sackett Harbor
1812 Battle of the Thames
1814 Queenston
1814 Lundy's Lane
Chippewa 14
1812 Lewiston
1814 Ft. Erie
1813 Frenchtown
1812 Brownstown
12 Detroit-Hull Surrender
1814 Fort Malden
1816 Annexed to
1836 Annexed to Ohio
Perry's Victory
1792 Cession to Pennsylvania
(SEE TABLE MAP VIII)
1801 West Point
1790 Maumee Ford
13 Ft. Meigs
1800 WEST'N. RES.
4 OHIO
SEE TABLE MAP VIII
813 Ft. Stephenson
1811 Tippecanoe
1794 Wayne's Campaign
1791 St. Clair's Defeat
PENNSYLVANIA
1794 Whiskey Rebellion
NEW YORK
ILLINOIS
8 ILL.
INDIANA
6 IND.
OHIO
Ter. N.W. of Riv. Ohio
SEE MAP IV
MARYLAND
1830 Peter Cooper's Engine
1844 Morse's Telegraph
1814 Bladensburg
1800 Washington
Baltimore
Ft. McHenry
North Point
1790 1841 District of Columbia
DEL.
1814 Washington
1799 Mt. Vernon
VIRGINIA
1807 RICHMOND Burr
2 KY.
Part of Va. Cession SEE MAP IV
1790 TERRITORY SOUTH OF THE RIVER OHIO
3 TENN.
N.C. Cession of Present State
1796-1802 SEE NOTE
1804 ANNEXED TO MISS. TY.
N.C. Cession
1802 Annexed to Georgia
1802 GEORGIA CESSION
1802 ANNEXED TO MISS. TY.
7 MISS.
9 ALA.
1798 MISSISSIPPI TY.
Orig. Ty. SEE MAP IV
12 ARK.
1804 ORLEANS TY. (SEE MAP IV)
1812 Annexed to Miss. Ty.
1813 Ft. Mimms
1814 Ft. Bowyer-Mobile Bay
1814 Lake Borgne
1815 New Orleans Battle Jan. 8
5 LA. (SEE MAP VI)
Pensacola 1814 1818
St. Mary's-1818 Gen. Jackson
14 FLA.
NORTH CAROLINA
SO. CAROLINA
1832 Columbia Convention Nullification
GEORGIA
1813 Talladega
1836 Creek War
1814 Tohopeka
1817 Seminoles and Creeks
SEMINOLES AND CREEKS
Flint River
St. Mary's
St. John's River
1819 Florida Ceded to U.S. by Spain
1822 FLORIDA TY.
1835 Fort King
1835 Dade Massacre
1837 Taylor's Battles
Lake Okeechobee
GULF OF MEXICO
10 ME.
MAINE
14 LaColle Mill
1 VT.
VERMONT
NEW HAMPSHIRE
MASSACHUSETTS
1813 Boxer and Enterprise
1812 Guerriere and Constitution
1813 Chesapeake and Shannon
1814 Hartford Convention
R.I.
1842 Dorr's Rebellion
CONN.
1807 Fulton
Hudson River
1804 Hoboken
1789 New York-Constitution
1815 President Captured
1791 Philadelphia U.S. Bank
NEW JERSEY
1811 President and Little Belt
1807 Chesapeake and Leopard
1812 Poictiers captured Frolic and Wasp
1814 Epervier and Peacock
ATLANTIC OCEAN
10
West from Washington
6
2
2
6
East from Washington

ADMITTED INTO THE UNION DURING THIS PERIOD

Order of Admission	NAME of STATE	Date of Admission
1 — 14	Vermont	Mar. 4, 1791
2 — 15	Kentucky	June 1, 1792
3 — 16	Tennessee	" 1796
4 — 17	Ohio	Nov. 29, 1802
5 — 18	Louisiana	Apr. 30, 1812
6 — 19	Indiana	Dec. 11, 1816
7 — 20	Mississippi	" 10, 1817
8 — 21	Illinois	" 3, 1818
9 — 22	Alabama	" 14, 1819
10 — 23	Maine	Mar. 15, 1820
11 — 24	Missouri	Aug. 10, 1821
12 — 25	Arkansas	June 15, 1836
13 — 26	Michigan	Jan. 26, 1837
14 — 27	Florida	Mar. 3, 1845

ADMINISTRATIONS DURING THIS PERIOD

No.	Name of President	Time Served	Period of Service	Name of Vice President
1	George Washington	2 Terms	1789-1797	John Adams
2	John Adams	1 Term	1797-1801	Thomas Jefferson
3	Thomas Jefferson	2 Terms	1801-1809	Aaron Burr George Clinton
4	James Madison	"	1809-1817	George Clinton Elbridge Gerry
5	James Monroe	"	1817-1825	Danl. D. Tompkins
6	John Q. Adams	1 Term	1825-1829	John C. Calhoun
7	Andrew Jackson	2 Terms	1829-1837	John C. Calhoun Martin Van Buren
8	Martin Van Buren	1 Term	1837-1841	Richard M. Johnson
9	Wm. H. Harrison	1 Month	1841	John Tyler
10	John Tyler	3 y. 11 m.	1841-1845	* Samuel L. Southard * Willie P. Mangum

* President *Pro tem.* of the senate—would have become acting president in case of the death of the president

PERIOD VI. 1845 TO 1860. 15 YEARS.

DISSENSION.

1845.—Polk.

Victoria.—Continued.

1845 *James K. Polk inaugurated President.—March 4.

*Naval Academy opened at Annapolis, Md.—October 10.

*Gun Cotton invented.

Texas admitted into the Union.—December 29.

1846 MEXICAN WAR. Thornton's party captured east of the Rio Grande.—April 26.

Fort Brown bombarded from Matamoras.—May 3–9.

Taylor marched from Point Isabel to relieve Ft. Brown.—May 7.

Battle of Palo Alto.—Taylor defeated 6,000 Mexicans under Arieta.—May 8.

Battle of Resaca de la Palma.—Taylor captured La Vega.—May 9.

Congress declared war to exist by act of Mexico.—May 13

Matamoras captured by Taylor.—May 18.

Oregon boundary established by treaty with Great Britain.—June 15.

Fremont defeated Californians at Sonoma, Cal.—June 25.

Kearney's March from Ft. Leavenworth, Kan., began.—June 30.

California declared independent by American settlers at Sonoma—July 4.

Monterey, Cal., captured by Com. Sloat.—July 7.

California declared a part of the United States at Monterey.—July 7.

Yerba Buena, Cal. (now San Francisco), captured by Com. Montgomery.—July 9.

Com. Stockton arrived at Monterey, Cal.—July 23.

*Wilmot Proviso offered, prohibiting slavery in acquired territory.—August 8.

Santa Fe, N. M., occupied by Kearney.—August 18.

Monterey, Mex., under Ampudia, captured by Taylor.—September 24.

Doniphan's March from Santa Fe to Saltillo.

Tampico, Mex., possessed by Com. Connor.—November 14.

Battle of Bracito, N. M.—Doniphan victorious.—December 25.

El Paso, Mex., occupied by Doniphan.—December 27.

Iowa re-admitted into the Union with present boundaries.—December 28.

1847 Battle of San Gabriel River, Cal.—Kearney defeated Californians.—January 8.

Yerba Buena named San Francisco.—January.

BATTLE OF BUENA VISTA.—Taylor's last battle.—Santa Anna defeated.—February 23.

Battle of Sacramento, Mex.—Doniphan victorious.—February 28.

VERA CRUZ and Ft. San Juan d'Ulloa surrendered to Scott.—March 27.

Battle of Cerro Gordo Pass.—Scott defeated Santa Anna.—April 18.

Puebla taken without a battle.—Scott remained three months.—May 15.

Mormons under Brigham Young arrived at Salt Lake Valley.—July 24.

Battle of Contreras.—Mexicans defeated in twenty minutes.—August 20.

Battle of Cherubusco.—Mexicans retreated.—August 20.

Worth captured Molino del Rey, outer defense of Chapultepec.—September 8.

Fortress of Chapultepec captured.—September 13.

1847 CITY OF MEXICO entered by Americans under Scott.—September 14.

Lane defeated Santa Anna at Huamantla.—October 9.

1848 Gold discovered on a branch of the Sacramento, Cal.—January 19.

TREATY OF PEACE signed at Guadaloupe Hidalgo.—Feb. 2. ("First Mexican Cession" ceded to the United States.)

*John Quincy Adams died.—February 20.

Wisconsin admitted into the Union.—May 29.

Oregon Territory formed.—August 14.

*Ex-President Van Buren first candidate of the Free Soil Party.

1849.—Taylor.

1849 Minnesota Territory formed.—March 3.

*Zachary Taylor inaugurated president.—March 5.

1850

1850.—Fillmore.

1850 *Death of President Taylor.—July 9.

*Millard Fillmore inaugurated President.—July 10.

*COMPROMISE OF 1850, or "Omnibus Bill" passed.—September 9.

(Repealed Missouri Compromise of 1820.)

California admitted into the Union.—September 9.

Utah Territory formed.—September 9.

*Fugitive slave law passed.—September 12.

*Slave Trade prohibited in the District of Columbia.—September 17.

Texas Cession of Territory to the General Government.—November 25.

Present Unorganized Territory a part of the Texas Cession.—November 25.

New Mexico Territory formed.—December 13.

1853.—Pierce.

1853 Washington Territory formed.—March 2.

*Franklin Pierce inaugurated President.—March 4.

*Death of Vice-President William R. King at Cahawba, Ala.—April 18.

Gadsden Purchase from Mexico.—December 30.

1854 KANSAS-NEBRASKA BILL, repealing Compromise of 1850, passed.—March 3.

Kansas Territory formed.—May 30.

Nebraska Territory formed.—May 30.

*Ostend Manifesto issued by American ministers.—October 21.

1855 *Kansas troubles.—Emigration from slave and free States.

*Niagara Suspension Bridge completed.

1857.—Buchanan.

1857 *James Buchanan inaugurated President.—March 4.

*DRED SCOTT DECISION.—Opinion delivered by Chief Justice Taney.—March 6.

Trouble with Mormons in Utah.—Military sent by the United States.

1858 Minnesota admitted into the Union.—May 11.

*First Message by the Atlantic Cable.—August 16.

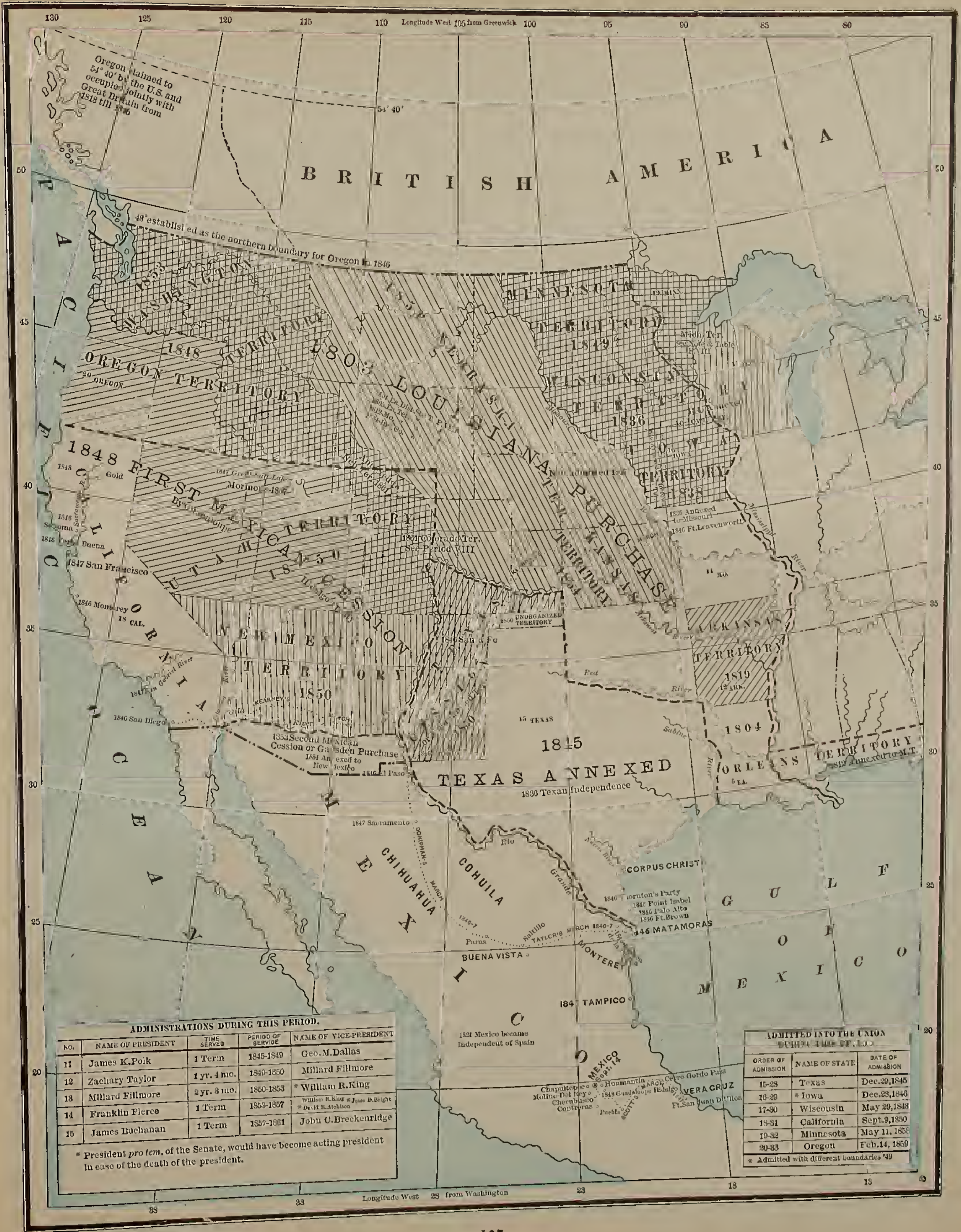
1859 Oregon admitted into the Union.—February 14.

John Brown seized United States Arsenal at Harper's Ferry. (See Map VII.)—October 16.

*Victoria Bridge, Montreal, opened.

NOTE.—In 1834 Missouri Territory became the Indian Country. That part of the Territory east of the Missouri and White Earth Rivers, except a parcel in the Northwestern part of the present State of Missouri, as shown on the map, was annexed to Michigan Territory. These changes could not be shown by the parallel lines without confusion. (See Map VI and Table following Map VIII.)

*Not on the Map.


Longitude West 105 from Greenwich
130
125
120
115
110
100
95
90
85
80
50
45
40
35
30
25
20
Oregon claimed to 54° 40′ by the U.S. and occupied jointly with Great Britain from 1818 till 1846
54° 40′
BRITISH AMERICA
48° established as the northern boundary for Oregon in 1846
PACIFIC OCEAN
1853 WASHINGTON TERRITORY
1848 OREGON TERRITORY
20 OREGON
1803 LOUISIANA PURCHASE
1854 NEBRASKA TERRITORY
1854 KANSAS TERRITORY
MINNESOTA TERRITORY 1849
19 MINN.
Mich. Ter. See Note & Table P. III
WISCONSIN TERRITORY 1836
IOWA TERRITORY 1838
16 IOWA
1836 Annexed to Missouri
1846 Ft. Leavenworth
11 MO.
Missouri
Mississippi River
Arkansas
1861 Colorado Ter. See Period VIII
1850 UNORGANIZED TERRITORY
1848 FIRST MEXICAN CESSION
UTAH TERRITORY 1850
1847 Great Salt Lake
Mormons 1847
1848 Gold
Sacramento R.
1846 Sonoma
1846 Yerba Buena
1847 San Francisco
1846 Monterey
18 CAL.
CALIFORNIA
1847 San Gabriel River
1846 San Diego
NEW MEXICO TERRITORY 1850
KEARNEY'S MARCH
Gila River
Colorado River
1846 Santa Fe
1853 Second Mexican Cession or Gadsden Purchase
1854 Annexed to New Mexico
1846 El Paso
ARKANSAS TERRITORY 1819
12 ARK.
Red River
Sabine
15 TEXAS
1845 TEXAS ANNEXED
1836 Texan Independence
1804 ORLEANS TERRITORY
5 LA.
1812 Annexed to M.T.
Rio Grande
Nueces River
CORPUS CHRISTI
1846 Thornton's Party
1846 Point Isabel
1846 Palo Alto
1846 Ft. Brown
1846 MATAMORAS
TAYLOR'S MARCH 1846-7
MONTEREY
Saltillo
BUENA VISTA
Parras
1847 Sacramento
DONIPHAN'S MARCH
CHIHUAHUA
COHUILA
MEXICO
1847 TAMPICO
1821 Mexico became Independent of Spain
MEXICO Sept. 14
Chapultepec
Molino Del Rey
Churubusco
Contreras
Huamantla
Guadaloupe Hidalgo
SCOTT'S MARCH
Puebla
Cerro Gordo Pass
VERA CRUZ
Ft. San Juan D'Ulloa
GULF OF MEXICO
Longitude West 28 from Washington
38
33
23
18
13

ADMINISTRATIONS DURING THIS PERIOD.

NO.	NAME OF PRESIDENT	TIME SERVED	PERIOD OF SERVICE	NAME OF VICE-PRESIDENT
11	James K. Polk	1 Term	1845-1849	Geo. M. Dallas
12	Zachary Taylor	1 yr. 4 mo.	1849-1850	Millard Fillmore
13	Millard Fillmore	2 yr. 8 mo.	1850-1853	* William R. King
14	Franklin Pierce	1 Term	1853-1857	William R. King * Jesse D. Bright * David R. Atchison
15	James Buchanan	1 Term	1857-1861	John C. Breckenridge

* President *pro tem*. of the Senate, would have become acting president in case of the death of the president.

ADMITTED INTO THE UNION DURING THIS PERIOD

ORDER OF ADMISSION	NAME OF STATE	DATE OF ADMISSION
15-28	Texas	Dec. 29, 1845
16-29	* Iowa	Dec. 28, 1846
17-30	Wisconsin	May 29, 1848
18-31	California	Sept. 9, 1850
19-32	Minnesota	May 11, 1858
20-33	Oregon	Feb. 14, 1859

* Admitted with different boundaries '49

PERIOD VII. 1860 TO 1865. 5 YEARS.

SECESSION.

1860 South Carolina seceded.—(For seceding States see table on map)—December 20.
1861 Star of the West fired upon off Charleston Harbor.—January 9.
Kansas admitted into the Union.—January 29.
CONFEDERATE GOVERNMENT organized at Montgomery, Ala.—February 8.
*Jefferson Davis, president; Alexander H. Stephens, vice-president.—February 9.
Colorado Territory formed.—(See Map VIII.)—February 28.
Dakota Territory formed.—(See Map VIII.)—March 2.
Nevada Territory formed.—(See Map VIII.)—March 2.
*Abraham Lincoln inaugurated president.—March 4.
Ft. Sumter, S. C., bombarded by Beauregard.—April 12.
United States arsenal at Harper's Ferry destroyed by Federals.—April 18.
Gosport navy-yard destroyed by Federals (Norfolk, Va.)—April 20.
Battle of Philippi, W. Va.—Confederate defeat.—June 3.
Battle of Big Bethel, Va.—Pierce defeated.—June 10.
Battle of Romney, Va.—Federal victory.—June 11.
Battle of Boonville, Mo.—Lyon Victorious.—June 17.
Battle of Carthage, Mo.—Gov. Jackson and Sigel.—Indecisive.—July 5.
Battle of Rich Mountain, W. Va.—Rosecrans victorious.—July 11.
Battle near Centreville, Va.—July 18.
Confederate Capital changed to Richmond, Va.—July 20.
BATTLE OF BULL RUN, Va.—McDowell defeated.—July 21.
Battle of Dug Spring, Mo.—Lyon victorious.—August 2.
Battle of Wilson's Creek, Mo.—Lyon killed.—August 10.
Battle of Hatteras Inlet, N. C.—Federal victory.—August 28-29.
Columbus, Ky., seized and fortified by Confederates.—September 4.
Grant occupied Paducah, Ky.—September 6.
Battle of Lexington, Mo.—Price defeated Mulligan.—September 17-20.
Battle of Ball's Bluff or Edwards' Ferry.—Baker killed.—October 21.
*Scott retired and McClellan appointed general-in-chief.—November 1.
Battle of Port Royal Entrance, S. C.—Federals victorious.—November 7.
Battle of Belmont, Mo.—Grant and Polk.—Indecisive.—November 7.
*Mason and Slidell taken from the Trent.—November 8.
1862 Battle of Mill Springs, Ky.—Thomas victorious.—January 19-20.
Ft. Henry, Tenn., captured by Foote.—February 6.
Battle of Roanoke Island, N. C.—Burnside victorious.—February 8.
Ft. Donelson, Tenn., surrendered to Grant.—February 16.
Battle of Pea Ridge, Ark.—Curtis victorious.—March 6-8.
The Virginia (Merrimac) destroyed the Cumberland and Congress at Hampton Roads, Va.—March 8.
BATTLE between the VIRGINIA and MONITOR at Hampton Roads, Va.—March 9.
Battle of New Madrid, Mo.—Pope victorious.—March 14.
Battle of New Bern, N. C.—Burnside victorious.—March 14.
Battle near Winchester, Va.—Shields victorious.—March 23.
BATTLE OF PITTSBURG LANDING or SHILOH, Tenn.—Grant defeated Beauregard.—A. S. Johnson killed.—20,000 men lost.—April 6-7.
Island No. 10, with 6,000 men, captured by Foote and Pope.—April 7.
Battle of Ft. Pulaski, Ga.—Gilmore victorious.—April 10-12.
Farragut's Fleet passed Fts. Jackson and St. Philip, La.—April 24.
NEW ORLEANS, La., captured by Farragut's fleet.—April 25.
New Orleans, La., occupied by Federals under Butler.—May 1.
Battle of Williamsburg, Va.—McClellan victorious.—May 5.
Norfolk, Va., captured by Wool.—May 10.
Hanover Court-house, Va., captured by Fitz John Porter.—May 27.
Beauregard evacuated Corinth, Miss.—May 27.
Battles of Seven Pines and Fair Oaks, Va.—McClellan victorious.—May 31 and June 1.
*Lee appointed to chief command of the Confederate army.—June 3.
Gunboat fight near Ft. Pillow, Tenn.—June 4.
Davis, successor of Foote, captured Memphis, Tenn.—June 6.
SEVEN DAYS' BATTLES in Virginia.—McClellan and Lee.—June 26 to July 1.
(Mechanicsville, June 26; Gaines' Mill, 27; Chickahominy, 28; Savage's Station, 29; White Oak Swamp, 29-30; Glendale, 30; Malvern Hill, July 1.)
Battle of Cedar Mountain, Va.—Jackson victorious.—Winder killed.—August 9.
*Sioux war in Minnesota began.—August.
POPE'S BATTLES, between Manassas and Washington, D. C.—August 26 to September 1.
(The more important were: Groveton, August 29; second Bull Run, 30; Chantilly, September 1.—Victorious campaign for Lee.—Kearney and Stevens killed.)
Battle of Richmond, Ky.—Kirby Smith victorious.—August 30.
INVASION OF MARYLAND by Lee.—Crossed the Potomac near Point of Rocks.—September 4-7.
Battle of South Mountain, Md.—McClellan victorious.—September 14.
Harper's Ferry, with 12,000 men, surrendered to Jackson by Miles.—September 15.
BATTLE OF ANTIETAM, Md.—McClellan and Lee.—September 17.
Munfordsville, Ky., captured by Confederates.—September 17.
Battle of Iuka, Miss.—Rosecrans victorious.—September 19-20
Battle of Corinth, Miss.—Rosecrans victorious.—October 3-4.
Battle of Perryville, Ky.—Unsuccessful attack by Bragg.—October 8.
Battle of Prairie Grove, Ark.—Blunt victorious.—December 7.
Battle of Fredericksburg, Va.—Lee victorious.—Federals lost 12,000 men.—December 13.
Battle of Kinston, N. C.—Foster victorious.—December 14.
Battle of Stone River on Murfreesboro', Tenn.—December 31 to January 3.
(One of the fiercest of the war.—Rosecrans victorious.)
1863 *Emancipation Proclamation issued by Lincoln.—January 1.
Battle of Ft. Hindman or Arkansas Post.—McClernand victorious.—Jan. 11.
Second Expedition to the Yazoo.—Grant arrived at Young's Point, La.—February 2.
Arizona Territory formed.—(See Map VIII.)—February 24.
*National Bank Act Approved.—February 25.
Idaho Territory formed.—(See Map VIII.)—March 3.
Third Expedition to the Yazoo, under Porter.—March 15.

Buchanan—Continued.

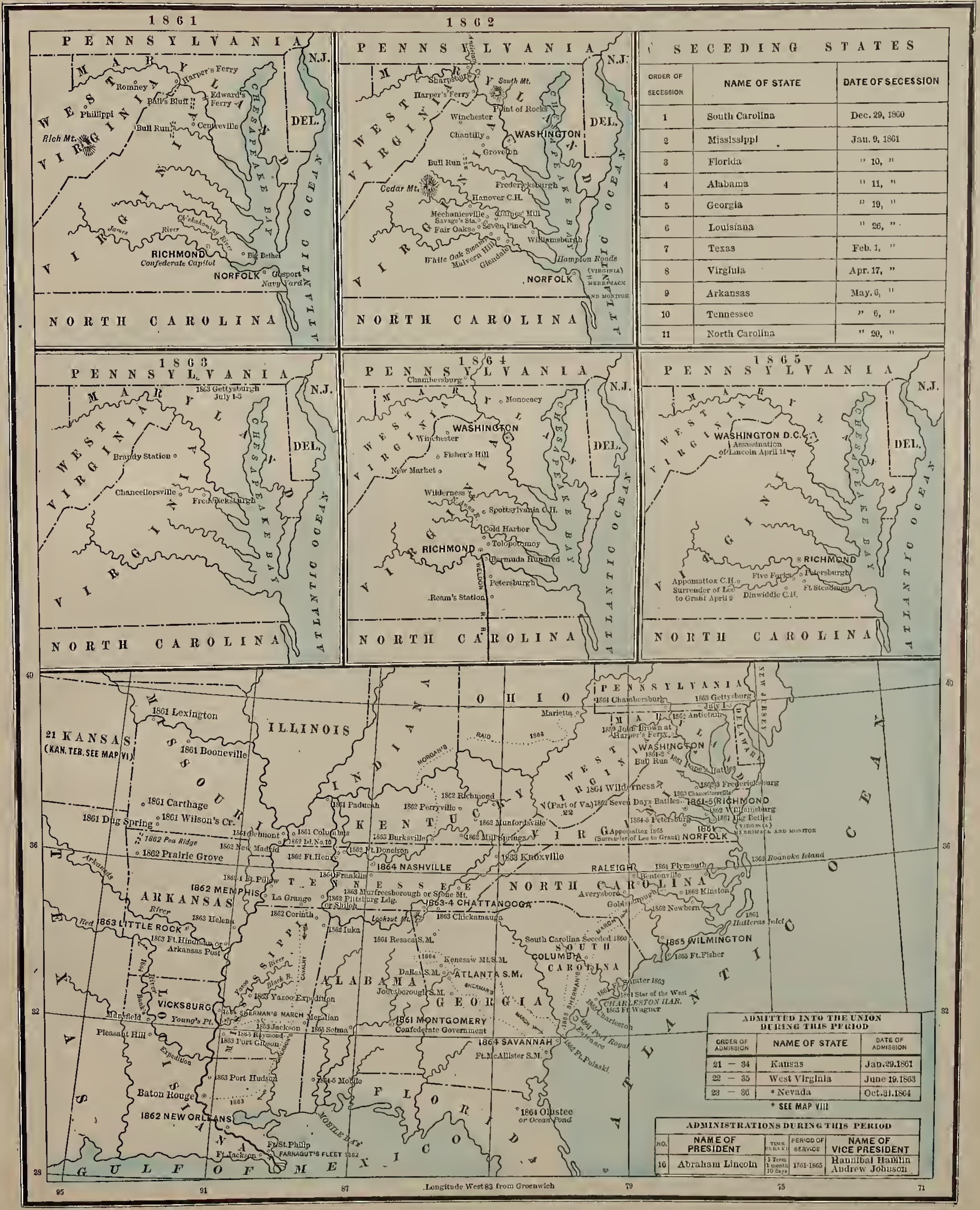
1861.—Lincoln.

Victoria.—Continued.

1863 Ft. Sumter, S. C. bombarded by the Federals—Dupont unsuccessful.—April 7.
Grierson's cavalry raid through Mississippi—Left La Grange, Tenn., April 17.
Battle of Port Gibson, Miss.—McClernand victorious.—May 1.
Battle of Chancellorsville, Va.—Lee victorious.—Federals lost 18,000 men.—May 2-3.
Battle of Fredericksburg, Va.—Early victorious.—May 3-4.
Battle of Raymond, Miss.—McPherson victorious.—May 12.
Battle of Big Black River, Miss.—McClernand victorious.—May 17.
Battle of Vicksburg, Miss.—Federals repulsed.—May 22.
Battle of Port Hudson, La.—Federals repulsed.—May 27.
Battle of Brandy Station, Va., by cavalry.—Gregg victorious.—June 9
*MARYLAND and PENNSYLVANIA invaded by Lee.—June.
West Virginia admitted into the Union.—June 19.
Morgan's raid.—Crossed the Cumberland River near Burksville, Ky.—June 27.
BATTLE OF GETTYSBURG, Pa.—Meade and Lee.—50,000 men lost.—July 1-3.
Battle of Helena, Ark.—Attack by Holmes repulsed.—July 4.
Surrender of Vicksburg to Grant by Pemberton.—July 4.
Port Hudson, La., surrendered to Banks.—July 8.
*Riots in New York City.—opposition to the draft.—July 13-16.
Jackson, Miss., destroyed by Sherman.—July 16.
Ft. Wagner, S. C., captured by Federals.—September 6.
Chattanooga, Tenn., occupied by Crittenden.—September 8.
Little Rock, Ark., occupied by Steele.—September 10.
Battle of Chickamauga, Ga.—Bragg victorious.—Rosecrans lost 16,000 men.—September 19-20.
Battles of Chattanooga and Lookout Mountain.—Federals defeat Bragg.—November 23-25.
Battle of Knoxville, Tenn.—Longstreet raised the siege.—December 4.
1864 Sherman's raid from Vicksburg.—reached Meridian, Miss.—February 14.
Battle of Olustee or Ocean Pond, Fla.—Finnegan defeated Seymour.—February 20.
Banks' Red River Expedition moved up the river.—March 12.
Battle of Mansfield or Sabine Cross-roads.—Banks defeated.—April 8.
Battle of Pleasant Hill, La.—Banks victorious.—April 9.
Battle of Ft. Pillow, Tenn.—Captured by Forrest.—April 13.
Plymouth, N. C., surrendered to Confederates under Hoke.—April 20.
Bermuda Hundred seized and intrenched by Butler.—May 5.
BATTLES OF THE WILDERNESS.—Between Grant and Lee.—30,000 men lost.—May 5-7.
SHERMAN'S GEORGIA CAMPAIGN, with 110,000 men began from Chattanooga, Tenn.—May 7.
Battle of Spottsylvania Court-house, Va.—20,000 men lost.—May 10.
Battle of Resaca, Ga.—Sherman defeated Johnston.—May 13-15.
Battle of Newmarket, Va.—Sigel defeated.—May 15.
Battles of North Anna, Va.—Federals victorious.—May 23-27.
Montana Territory formed.—(See Map VIII.)—May 26.
Battle of Dallas, Ga.—Sherman victorious.—May 25-28.
Battle of Tolopotomoy Creek, Va.—May 30.
Battle of Cold Harbor, Va.—Grant repulsed by Lee.—June 1-3.
BATTLE OF PETERSBURG, Va.—Grant repulsed.—10,000 men lost.—June 16-18.
Siege of Petersburg, Va., by Grant began.—June 18.
*The Alabama sunk by the Kearsarge off Cherbourg, France.—June 19.
Battle of Kenesaw Mountain, Ga.—Sherman repulsed.—June 27.
Invasion of Maryland by Early.—Washington, D. C., threatened.—July 9-14.
Battle of Monocacy, Md.—Early defeated by Wallace.—July 9.
Battles at Atlanta, Ga.—Sherman victorious.—McPherson and Walker killed.—July 22-28.
Chambersburg, Pa., attacked and burned by McCausland.—July 30.
Battle of Petersburg.—Explosion of mine.—Federal repulse.—July 30.
Battle of Mobile Bay, Ala.—Farragut victorious.—August 5.
Weldon Railroad, running south from Richmond, seized by Federals.—August 18.
Battle of Ream's Station, Va.—Weldon Railroad.—Hancock repulsed.—August 25.
Battle of Jonesboro', Ga.—Sherman victorious.—August 31 and September 1.
Atlanta, Ga., occupied by Sherman.—September 2.
Battle of Winchester, Va.—Sheridan victorious.—September 19.
Battle of Fisher's Hill, Va.—Sheridan victorious.—September 22.
Nevada admitted into the Union.—(See Map VIII.)—October 31.
Battle of Franklin, Tenn.—Schofield victorious.—November 30.
Ft. McAllister, Ga., captured by Hazen.—December 13.
Battle of Nashville, Tenn.—Thomas victorious.—December 15-16.
Savannah, Ga., occupied by Sherman's army.—December 22.
1865 Ft. Fisher, N. C., captured by Porter and Terry.—January 15.
Sherman's March northward from Savannah, Ga.—February 1.
Columbia, S. C., surrendered to Federals.—Sherman's march.—February 17.
Charleston, S. C., occupied by Federals.—Sherman's march.—February 18.
Wilmington, N. C., captured by Schofield.—February 22.
*Lincoln began second presidential term.—March 4.
Battle of Averysboro', N. C.—Slocum victorious.—March 16.
Battle of Bentonsville, N. C.—Slocum victorious.—March 19.
Armies of Sherman, Terry and Schofield united at Goldsboro', N. C.—March 23.
Battle of Ft. Steadman, at Petersburg, Va.—Indecisive.—March 25.
Battle of Dinwiddie Court-house, Va.—Sheridan victorious.—March 31.
Battle of Five Forks, Va.—Sheridan victorious.—April 1.
Battle of Petersburg, Va.—Grant carried outer lines.—April 1-2.
Battle of Selma, Ala.—Wilson captured the city.—April 2.
Petersburg and Richmond occupied by Grant.—April 3.
LEE SURRENDERED TO GRANT at Appomattox Court-house, Va.—April 9.
Mobile, Ala., occupied by Canby.—April 12.
PRESIDENT LINCOLN assassinated at Washington, D. C.—April 14.
*Andrew Johnson inaugurated President.—April 15.

Johnson.—1865.

Not on the map.


1861
PENNSYLVANIA
MARYLAND
Harper's Ferry
Romney
Ball's Bluff
Edward's Ferry
Phillippi
Bull Run
Centreville
Rich Mt.
WEST VIRGINIA
VIRGINIA
CHESAPEAKE BAY
DEL.
N.J.
James River
Chickahominy River
RICHMOND
Confederate Capitol
Big Bethel
NORFOLK
Gosport Navy Yard
ATLANTIC OCEAN
NORTH CAROLINA
1862
Antietam
Sharpsburg
South Mt.
Harper's Ferry
Point of Rocks
Winchester
Chantilly
WASHINGTON
Groveton
Bull Run
Cedar Mt.
Fredericksburgh
Hanover C.H.
Mechanicsville
Gaines' Mill
Savage's Sta.
Fair Oaks
Seven Pines
Williamsburgh
White Oak Swamp
Malvern Hill
Glendale
Hampton Roads
(VIRGINIA) MERRIMACK AND MONITOR
NORFOLK
1863
1863 Gettysburgh July 1-3
Brandy Station
Chancellorsville
Fredericksburgh
1864
Chambersburg
Monocacy
WASHINGTON
Winchester
Fisher's Hill
New Market
Wilderness
Spottsylvania C.H.
Cold Harbor
Totopotomoy
RICHMOND
Bermuda Hundred
Petersburgh
WELDON R.R.
Ream's Station
1865
WASHINGTON D.C.
Assassination of Lincoln April 14
RICHMOND
Five Forks
Petersburgh
Appomattox C.H.
Surrender of Lee to Grant April 9
Dinwiddie C.H.
Ft. Steadman
OHIO
ILLINOIS
INDIANA
MISSOURI
21 KANSAS
(KAN. TER. SEE MAP VI)
1861 Lexington
1861 Booneville
1861 Carthage
1861 Wilson's Cr.
1861 Dug Spring
1862 Pea Ridge
1862 Prairie Grove
MORGAN'S RAID 1863
Marietta
1864 Chambersburg
1863 Gettysburg July 1-3
1862 Antietam
1859 John Brown at Harper's Ferry
WASHINGTON
1861-2 Bull Run
Cedar Mt.
Battles
1862-3 Fredericksburg
1863 Chancellorsville
1864 Wilderness
(Part of Va.) 1862 Seven Days Battles
1861-5 RICHMOND
1862 Williamsburg
1861 Big Bethel
1864-5 Petersburg
Appomattox 1865 (Surrender of Lee to Grant)
NORFOLK
(VIRGINIA) MERRIMACK AND MONITOR
1862 Roanoke Island
1861 Paducah
1862 Perryville
1862 Richmond
KENTUCKY
1862 Munfordsville
1861 Columbus
1861 Belmont
1862 Isl. No. 10
1862 New Madrid
1863 Burksville
1862 Mill Springs
1863 Knoxville
1862 Ft. Henry
1862 Ft. Donelson
1864 NASHVILLE
1864 Franklin
1864 Ft. Pillow
1862 MEMPHIS
La Grange
1862 Pittsburg Ldg. or Shiloh
1863 Murfreesborough or Stone Mt.
TENNESSEE
1863-4 CHATTANOOGA
Lookout Mt.
1863 Chickamauga
1862 Corinth
1862 Iuka
ARKANSAS
Arkansas River
1863 Helena
Red River
1863 LITTLE ROCK
1863 Ft. Hindman or Arkansas Post
RALEIGH
1861 Plymouth
Bentonville
Averysboro
Goldsboro
1862 Kinston
1862 Newbern
1861 Hatteras Inlet
NORTH CAROLINA
1865 WILMINGTON
1865 Ft. Fisher
South Carolina Seceded 1860
SOUTH CAROLINA
COLUMBIA
1864 Resaca S.M.
1864 Kenesaw Mt. S.M.
Dallas S.M.
ATLANTA S.M.
Jonesborough S.M.
SHERMAN'S MARCH
GEORGIA
ALABAMA
MISSISSIPPI
Yazoo
Black R.
1863 Yazoo Expedition
CAVALRY
VICKSBURG
Young's Pt.
1864 SHERMAN'S MARCH Meridian
1863 Jackson
1863 Raymond
1863 Port Gibson
1865 Selma
1861 MONTGOMERY
Confederate Government
1864 SAVANNAH
Ft. McAllister S.M.
1862 Ft. Pulaski
1861 Port Royal
Ft. Sumter 1863
1861 Star of the West
CHARLESTON HAR.
1863 Ft. Wagner
1865 Charleston
Mansfield
Pleasant Hill
Banks Expedition
LOUISIANA
TEXAS
1863 Port Hudson
Baton Rouge
1862 NEW ORLEANS
Ft. St. Philip
Ft. Jackson
FARRAGUT'S FLEET 1862
1864-5 Mobile
MOBILE BAY
FLORIDA
1864 Olustee or Ocean Pond
GULF OF MEXICO
ATLANTIC OCEAN
PENNSYLVANIA
NEW JERSEY
DELAWARE
MARYLAND
WEST VIRGINIA
VIRGINIA
40
36
32
28
95
91
87
Longitude West 83 from Greenwich
79
75
71

ORDER OF SECESSION	NAME OF STATE	DATE OF SECESSION
1	South Carolina	Dec. 20, 1860
2	Mississippi	Jan. 9, 1861
3	Florida	" 10, "
4	Alabama	" 11, "
5	Georgia	" 19, "
6	Louisiana	" 26, "
7	Texas	Feb. 1, "
8	Virginia	Apr. 17, "
9	Arkansas	May 6, "
10	Tennessee	" 6, "
11	North Carolina	" 20, "

SECEDING STATES

ADMITTED INTO THE UNION DURING THIS PERIOD

ORDER OF ADMISSION	NAME OF STATE	DATE OF ADMISSION
21 — 34	Kansas	Jan.29.1861
22 — 35	West Virginia	June 19.1863
23 — 36	* Nevada	Oct.31.1864

* SEE MAP VIII

ADMINISTRATIONS DURING THIS PERIOD

NO.	NAME OF PRESIDENT	TIME SERVED	PERIOD OF SERVICE	NAME OF VICE PRESIDENT
16	Abraham Lincoln	1 Term 1 month 10 days	1861-1865	Hannibal Hamlin Andrew Johnson

PERIOD VIII. 1865 TO 1892. 27 YEARS.

PEACE.

Victoria—Continued.

Johnson—Continued.

1865 *Thirteenth Amendment to the Constitution declared in force.—December 18.

1866 *Fenian raids into Canada.

Tennessee reconstructed by act of July 24.

Civil War proclaimed at an end.—August 20.

1867 Nebraska admitted into the Union.—March 1.

*Reconstruction Act passed over President's veto.—March 2.

*Tenure of Office Act passed over President's veto.—March 2.

Downfall of Maximilian in Mexico. (Shot at Queretaro.)—June 19.

Alaska purchased of Russia.—June 20.

Dominion of Canada established.—July 1.

1868 *Secretary Stanton declared removed from office by President Johnson.—February 21.

*Johnson's impeachment trial began.—March 30.

*Johnson acquitted by a vote of 35 to 19, not two-thirds.—May 26.

Arkansas reconstructed.—June 22.

Alabama, Florida, Georgia, Louisiana and North Carolina reconstructed.—June 25.

Wyoming Territory formed.—July 25.

*Fourteenth Amendment to the Constitution declared in force.—July 28.

*General amnesty proclaimed by President Johnson.—December 25.

1869.—Grant, two terms.

1869 *Ulysses S. Grant inaugurated President.—March 4.

PACIFIC RAILROAD (Union and Central) completed.—May 10. (Length, 1,910 miles; cost, $252,000,000.)

WOMAN SUFFRAGE in Wyoming.—December 6.

1870 Virginia reconstructed.—January 27.

Mississippi reconstructed.—February 3.

*Fenian raids into Canada resumed.

Texas reconstructed.—March 30.

*Fifteenth Amendment to the Constitution declared in force.—March 30.

*War between France and Germany began July 19; ended May 10, 1871.

(Sales of arms difficulties in the United States resulted from this war.)

1871 National Park established in Yellowstone Valley.—February 28.

*LEGAL-TENDER LAWS declared constitutional by the Supreme Court.—May 1.

Fire at Chicago, Ill.—Estimated loss, $300,000,000.—October 10-12.

*TREATY OF WASHINGTON, providing for arbitration on the Alabama claims, etc., agreed upon by Joint High Commission.—December 15.

*CIVIL SERVICE REFORM.—Commission established by act of March 3, promulgated report December 19.

1872 *National Bureau of Education established.—February 8.

*GENEVA AWARD.—$15,500,000 awarded to the United States by the arbitrators on the Alabama claims, etc.—September 14.

SAN JUAN boundary dispute decided in favor of the United States.—San Juan Island to the United States.—October 21.

Fire at Boston, Mass.—Estimated loss, $100,000,000.—Nov. 9-10.

Modoc war in California began.—November 29.

1873 *Credit Mobilier.—Committee appointed December 2, 1872, to investigate frauds in the construction of the Pacific Railroad reported.—February 24.

*"Salary Grab" act passed.—March 3.

*Grant began second presidential term.—March 4.

1875 *Act providing for specie payments on January 1, 1879, approved.—January 14.

*Death of Vice-President Wilson, at Washington, D. C.—November 22.

Thomas W. Ferry, President *pro tempore* of the Senate.

1876 Centennial Exhibition opened at Philadelphia, May 10; closed November 10.

Colorado admitted into the Union.—August 1.

*Presidential election.—November 7.

(Contest between the Republican and Democratic parties as to its validity.)

1877.—Hayes.

1877 *ELECTORAL COMMISSION provided for by act of January 29.

*Hayes and Wheeler declared elected by Congress.—March 2.

*Rutherford B. Hayes inaugurated President.—March 5.

*President Hayes' civil service order issued.—June 22.

*War between Russia and Turkey began.—Ended 1878.

Railroad riots at Pittsburgh, Albany, Chicago, St. Louis, etc.—July 22-24.

1878 Yellow fever in Louisiana, Mississippi, Tennessee, Kentucky, etc.

*Silver dollar made legal tender over President's veto.—Feb. 28.

*Gold sells at par in Wall street.—December 17.

1879 *RESUMPTION OF SPECIE PAYMENTS.—Act of January 14, 1875.—January 1.

*Jeannette sails from San Francisco to North Pole.—July 9.

1880 *Increasing Emigration.—456,000 immigrants arrived during year ending December 31.

*Population of United States over 50,000,000.—Tenth census.

1881 Garfield

1881 *James A. Garfield inaugurated President.—March 4.

President Garfield shot at Washington, D. C.—July 2.

*Death of President Garfield at Long Branch, N. J.—Sept. 19.

*Chester A. Arthur inaugurated President, at New York City.—September 19.

*560,000 immigrants arrived in the United States during the nine months ending September 30.

Centennial Celebration at Yorktown.—October 19.

*Survivors of Jeannette heard from.—December 20.

1882 *Terrible accident at Spuyten Duyvil, N. Y.—January 13.

*Guiteau, the assassin, found guilty, January 25.—Hung June 30.

*Transit of Venus.—December 6.

1883 *New York and Brooklyn Bridge opened.—May 24.

*Great Strike of Telegraphers' Brotherhood in the U. S.—July 19—August 16.

*Northern Pacific Railroad open for traffic.—September 8.

*Two Cent Letter Postage goes into effect throughout the U. S.—October 1.

*Lord Lansdowne inaugurated Governor-General of Canada *vice* the Marquis of Lorne.—October 23.

Victoria—Continued.

Arthur. | 1885—Cleveland.

1884 *Bodies of Jeannette explorers arrive in New York.—February 22.

Washington Monument completed.—December 6.

1885 Dedication of Washington Monument.—February 21.

*GROVER CLEVELAND inaugurated President.—March 4.

Rebellion in Saskatchewan, British America, began March 23; Riel captured May 15, and executed at Regina.—November 16.

*Revised Old Testament published.—May 15.

*Bartholdi Statue of Liberty arrived in New York.—June 19.

GENERAL U. S. GRANT dies at Mount McGregor, N. Y., July 23; and buried at Riverside Park, N. Y.—August 8.

*Gen. Geo. B. McClellan died.—October 29.

*Vice-President Thos. A. Hendricks died.—November 25.

*Wm. H. Vanderbilt, the noted millionaire, died.—December 8.

*U. S. Senate passed the Presidential Succession bill.—Dec. 17.

1886 *Gen. Winfield S. Hancock died.—February 9.

*Horatio Seymour died.—February 12.

*Great labor agitations throughout the U. S.—May 1.

Anarchists explode a dynamite bomb, killing and wounding many policemen and rioters, at Haymarket Square, Chicago.—May 4.

Grover Cleveland, President of U. S., married to Miss Frances Folsom.—June 2.

Judge David Davis died at Bloomington, Ill.—June 26.

Samuel J. Tilden died.—August 4.

The Great Anarchist Trial commenced at Chicago, Ill., at 10 a. m., June 21, and ended at 10 a. m. August 20. The jury brought in a verdict of murder in the first degree in the case of seven of defendants, and one to serve fifteen years in prison.—June 21. August 20.

Death of Ex-President Chester A. Arthur.—November 18.

Death of General John A. Logan.—December 26.

1887 The Inter-state Commerce bill passes the Senate.—January 14.

The President signs the Inter-state Commerce bill.—February 4.

Rev. Henry Ward Beecher died.—March 8.

Wm. A. Wheeler, ex-Vice-President of U. S., died.—June 4.

Gov. Oglesby commutes the sentence of Samuel Fielden and Michael Schwab, the Chicago Anarchists, to imprisonment for life.—November 10. Louis Lingg commits suicide.—Nov. 10. August Spies, A. R. Parsons, Adolph Fischer and Geo. Engel executed.—Nov. 11.

1888 Ex-Senator Roscoe Conkling died.—April 18.

Democratic National Convention at St. Louis nominated Grover Cleveland, of New York, for President, and Allan G. Thurman, of Ohio, for Vice-President.—June 6.

Philip H. Sheridan, General of U. S. Army, died.—Aug. 5.

The President signed the Chinese Exclusion Bill.—Oct. 1.

The Presidential and Congressional Elections were held. Benjamin Harrison was elected President of U. S., and Levi P. Morton, Vice-President.—Nov. 6.

1889—Harrison.

1889 The President signs bill making the following new States: North Dakota, South Dakota, Montana and Washington.—Feb. 22.

President Benjamin Harrison and Vice-President Levi P. Morton inaugurated.—March 4.

Terrible flood at Johnstown, Pa., caused by bursting of a reservoir. The entire valley of the Conemaugh flooded. Loss of life estimated about 5,000. Loss of property almost incalculable.—May 31, June 1.

The Cronin trial began August 30, ended December 16. John F. Beggs was acquitted; John Kunze, guilty of manslaughter, three years, and Daniel Coughlin, Patrick O'Sullivan and Martin Burke receive life sentences.

1890 Samuel J. Randall died.—April 13.

Great floods in Mississippi Valley during April.

The World's Fair Bill passed the Senate.—April 21.

President Harrison signs the World's Fair Bill.—April 25.

Monument to Robert E. Lee was unveiled at Richmond, Va.—May 29.

Idaho became a State.—July 3.

Wyoming became a State.—July 10.

Death of Gen. Clinton B. Fisk.—July 9.

Death of Major-General John C. Fremont.—July 13.

The McKinley Tariff Bill signed by President Harrison.—Oct. 1.

New Tariff Bill went into effect.—Oct. 8.

Outbreak of the Indians.—Dec.

Death of Sitting Bull.—Dec. 15.

The President issued a proclamation announcing the fact that the World's Fair will be held in Chicago in 1893.—Dec. 24th.

Death of Gen. F. E. Spinner, Ex-Treasurer of U. S.—Dec. 31.

1891 Death of Wm. Windom, Secretary of the Treasury.—Jan. 29.

Death of Admiral David D. Porter.—Feb. 13.

Death of Gen. W. T. Sherman.—Feb. 14.

A mob in New Orleans attack the jail and kill eleven Italians who were indicted for the murder of David Hennessey. Intense excitement all over the country.—March 14.

Death of P. T. Barnum, the great showman.—April 7.

The first ground broken, i. e. for the first exhibition building at World's Fair Grounds, was that for the Women's Building.—July 9.

1892 U. S. Regulars and Texan Rangers oppose the movements of Garza, the Mexican revolutionist on the Texan border.—Jan. 2.

1892 The eminent American Sculptor, Randolph Rogers, died at Rome, Italy, Jan. 15th.

Free Silver coinage debate in Congress, March 22-24.

Terrible loss of life at Oil City and Titusville, Pa., through floods and fire. Over 200 lives lost, June 5th.

Ultimatum sent to Chili.—Jan. 23.

Chili apologizes.—Jan. 28.

Constitutionality of McKinley tariff act affirmed by Supreme Court.—Feb. 29.

Behring Sea modus vivendi approved.—April 19.

Harrison and Reid nominated.—June 13.

Cleveland and Stevenson nominated.—June 24.

Great strike and riots at Homestead, Penn.—July 3.

Slaughter of Pinkerton men at Homestead.—July 6.

Death of Cyrus W. Field, capitalist.—July 11.

H. C. Frick, chairman Carnegie Steel Co., shot by Berkman.—July 23.

Geo. Shiras, appointed associate Justice U. S. Supreme Court.—July 26.

Inman steamer, City of Paris, breaks the ocean record 5 d., 12 h., 58 m.—July 27.

Central Labor Union rejects anarchistic resolutions.—July 30.

Congress appropriates $2,500,000 to the World's Fair.—August 5.

Chinese sailors forbidden employment on American ships.—August 5.

International Monetary representatives appointed.—August 7.

Railroad strike of switchmen at Buffalo. Great destruction of property.—August 14.

Cholera brought to New York City by Hamburg steamer Mouravia.—Aug. 31.

Death of George William Curtis, Journalist.—August 31.

Retaliatory Canada Canal tolls go into operation.—September 1.

The great Chicago University opened.—September 1.

Nancy Hanks breaks all trotting records, 2.04.—September 28.

World's Columbian Festivities at New York.—October 10 to 13.

Dedication World's Columbian Fair Buildings at Chicago.—October 19 to 21.

Death of Mrs. President Harrison.—October 25.

The Boston's win the Base Ball penant for 1892.—October 25.

Great fire at Milwaukee, loss $6,000,000.—October 28.

Dedication of Anarchist's Monument near Chicago.—November 6.

National election, democratic party successful.—November 6.

Great strike at New Orleans declared off.—November 11.

Annual Conference of Catholic Archbishops at New York.—November 18.

Grandmaster Workman Powderly favors exclusion of foreigners for 10 years.—November 16.

Homestead labor strike declared off.—November 20.

Yale College wins the Foot Ball penant.—November 24.

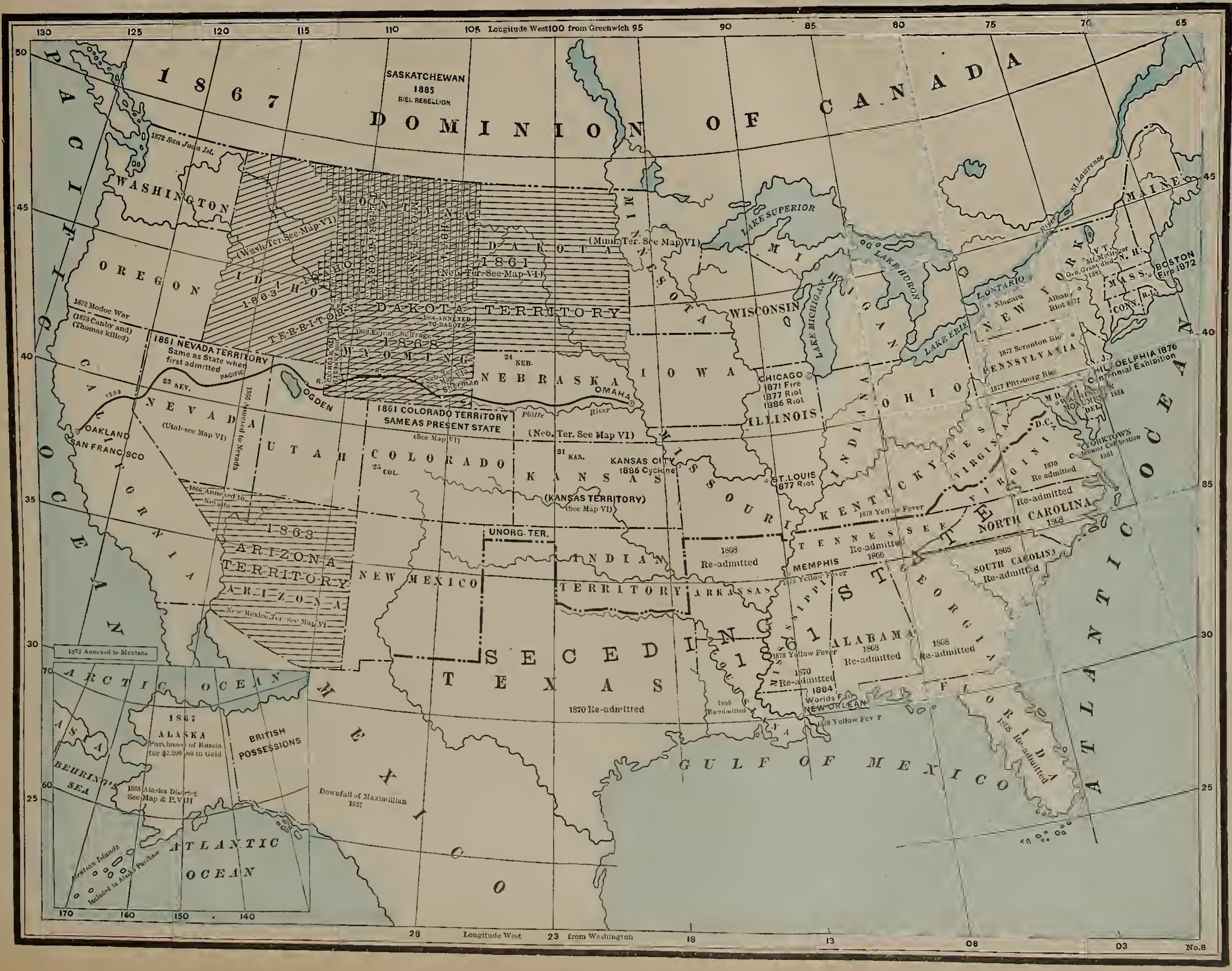
Death of Jay Gould, capitalist.—December 3.

U. S. Supreme Court decides Lake Front case in favor of Chicago.—Dec. 5.

Judge Gresham decides against Inter-State Commission.—December 7.

Rock Island telegraphers strike.—December 6.

First shipment of Souvenir Coins to Chicago.—December 13.


130
125
120
115
110
105 Longitude West 100 from Greenwich 95
90
85
80
75
70
65
50
45
40
35
30
25
1867 DOMINION OF CANADA
SASKATCHEWAN
1885
RIEL REBELLION
PACIFIC OCEAN
1872 San Juan Isl.
WASHINGTON
(Wash. Ter. See Map VI)
OREGON
1872 Modoc War
(1873 Canby and)
(Thomas killed)
IDAHO
1863 IDAHO TERRITORY
MONTANA
MONTANA TERRITORY
1864
DAKOTA
1861
(Neb. Ter. See Map VI)
DAKOTA TERRITORY
(Minn. Ter. See Map VI)
1864 ANNEXED TO DAKOTA
1869 Female Suffrage
1868
WYOMING
1869 ANNEXED TO WYOMING
(Neb. Ter. See Map VI)
Sherman
1861 NEVADA TERRITORY
Same as State when
first admitted
PACIFIC
23 NEV.
1869
NEVADA
(Utah-see Map VI)
1866 Annexed to Nevada
OGDEN
UTAH
1861 COLORADO TERRITORY
SAME AS PRESENT STATE
(See Map VI)
COLORADO
25 COL.
OAKLAND
SAN FRANCISCO
CALIFORNIA
1866 Annexed to Nevada
1863
ARIZONA
TERRITORY
ARIZONA
New Mexico Ter. See Map VI
NEW MEXICO
24 NEB.
NEBRASKA
OMAHA
Platte
River
(Neb. Ter. See Map VI)
21 KAN.
KANSAS
KANSAS CITY
1886 Cyclone
(KANSAS TERRITORY)
(See Map VI)
UNORG. TER.
INDIAN TERRITORY
MINNESOTA
IOWA
WISCONSIN
LAKE SUPERIOR
MICHIGAN
LAKE MICHIGAN
LAKE HURON
CHICAGO
1871 Fire
1877 Riot
1886 Riot
ILLINOIS
INDIANA
OHIO
ST. LOUIS
1877 Riot
MISSOURI
KENTUCKY
1878 Yellow Fever
TENNESSEE
Re-admitted
1866
MEMPHIS
1878 Yellow Fever
ARKANSAS
1868
Re-admitted
SECEDING 1861 STATES
TEXAS
1870 Re-admitted
1868
Re-admitted
MISSISSIPPI
1878 Yellow Fever
1870
Re-admitted
1884
Worlds Fair
NEW ORLEANS
1878 Yellow Fever
LOUISIANA
ALABAMA
1868
Re-admitted
GEORGIA
1868
Re-admitted
FLORIDA
1868 Re-admitted
SOUTH CAROLINA
1868
Re-admitted
NORTH CAROLINA
1868
Re-admitted
VIRGINIA
1870
Re admitted
WEST VIRGINIA
D.C.
YORKTOWN
Centennial Celebration
1881
MD.
WASHINGTON MONUMENT 1884
DEL.
N. J.
PHILADELPHIA 1876
Centennial Exhibition
1877 Scranton Riot
PENNSYLVANIA
1877 Pittsburg Riot
LAKE ERIE
L. ONTARIO
Niagara
NEW YORK
Albany
Riot 1877
Mt. McGregor
Gen. Grant died
1885
VT.
N. H.
MAINE
St. Lawrence
River
MASS.
BOSTON
Fire 1872
CONN.
R. I.
ATLANTIC OCEAN
GULF OF MEXICO
MEXICO
Downfall of Maximillian
1867
1873 Annexed to Montana
ARCTIC OCEAN
1867
ALASKA
Purchased of Russia
for $7.200.000 in Gold
BRITISH
POSSESSIONS
ASIA
BEHRING'S
SEA
1868 Alaska District
See Map & P. VIII
Aleutian Islands
Included in Alaska Purchase
ATLANTIC
OCEAN
70
60
170
160
150
140
28
Longitude West
23 from Washington
18
13
08
03
No. 8

EXISTENT AND OBSOLETE DIVISIONS OF THE UNITED STATES*

Order.	Name of Division.	Year of Admission.	Formed from.	Consisted of Present Divisions.	Additions.		Subtractions.		Became Obsolete.
					Yr.	Territory.	Yr.	Territory.	
13	Delaware	1776	Original Territory	Del					
13	Pennsylvania	1776	Original Territory	(a) *Pa*	1792	*N. Y. Cession.*			
13	New Jersey	1776	Original Territory	N. J					
13	Georgia	1776	Original Territory	(c)	1802	*Ter. S. Riv. O.*	1802	(k) Ga. Cession	
13	Connecticut	1776	Original Territory	(c)			1786 1800	Conn. Cession West Reserve	
13	Massachusetts	1776	Original Territory	(c)	1861	(d) *R. I.*	1785 1820 1855 1861	Mass. Cession Maine (d) P. to N. Y. (d) P. to R. I.	
13	Maryland	1776	Original Territory	Md., D. C.			1700	(d) P. to D. C.	
13	South Carolina	1776	Original Territory	(c)			1787	S. C. Cession	
13	New Hampshire	1776	Original Territory	N. H					
13	Virginia	1776	Original Territory	(c)	1846	(d) *D. C.*	1784 1790 1863	Va. Cession P. to D. C. W. Va.	
13	New York	1776	Original Territory	(c)	1855 1880	(d) *Mass.* (d) *Vt.*	1781 1791	(b) N. Y. Cession Vt.	
13	North Carolina	1776	Original Territory	(c)			1790	N. C. Cession	
13	Rhode Island	1776	Original Territory	*R. I., Mass*	1861	(d) *Mass*	1861	(d) P. to Mass	
14	Territory Northwest of the River Ohio.	1787	Mass. Cess., Conn. Cess., *Va. Cess., Orig. Territory.*	O., Ind., Ill., Mich., Wis., *Minn.*			1800 1802 1802	Ind. Ter. P. to Ind. Ter. Became O.	1802
15	(e) Territory South of the River Ohio.	1790	S. C. Cess., N. C. Cess., *Va. Cess.*	Ky., Tenn., *Ga., Ala., Miss.*	1802	Ga. Cession	1792 1796 1802 1804	Ky Tenn. P. to Ga. Became *Miss. Ter.*	1804
16	District of Columbia.	1790	*Md., Va*	*Md., Va*			1846 1880	P. to Va. (d) P. to N. Y.	
17	Vermont	1791	*N. Y.*	Vt					
18	Kentucky	1792	*Ter. S. Riv. O.*	Ky					
19	Tennessee	1796	*Ter. S. Riv. O.*	Tenn					
20	(f) Mississippi Territory.	1798	*Orig. Ter.*	*Ala., Miss*	1804 1812	Ter. S. Riv. O. Orl. Ter.	1817 1817	Ala. Ter. Became Miss.	1817
21	(g) Indiana Territory.	1800	*Ter. N. W. Riv. O.*	Ind., Ill., Wis., *Minn., Mich.*	1802	*Ter. N. W. Riv. O.*	1805 1809 1816 1818	Mich. Ter. Ill. Ter. P. to Ind. Became *Mich. Ter.*	1818
22	Ohio	1802	Ter. N. W. Riv. O.	*O.*	1836	†*Mich. Ter.*			
23	Orleans Territory	1804	*La. Purchase*	La., *Miss., Ala*			1812 1812	La Became *Miss. Ter.*	1812
24	(g) District of Louisiana.	1804	*La. Purchase*	Ark., Mo., Ia., Neb. Or., Dak., Ind. Co., Mon., Idaho, Wash., *Minn., Kan., Colo., Wyo.*			1805	Became La. Ter.	1865
25	Louisiana Territory	1805	Dist. of La	(See Dist. of La.)			1812	Became Mo. Ter.	1812
26	Michigan Territory	1865	*Ind. Ter*	*Mich., Ind., O.*	1818 1834	IndTer., IllTer †*Mo. Ter.*	1816 1836 1836 1837	P. to Ind. †Wis. Ter. P. to O. Became Mich.	1837
27	Illinois Territory	1809	*Ind. Ter*	Ill., *Wis., Minn., Mich.*			1818 1818	Ill Became *Mich. Ter.*	1818
28	Louisiana	1812	*Orig. Ter*	La					
29	Missouri Territory	1812	La. Ter	(See Dist. of La.)			1819 1821 1834 1834	Ark. Ter. Mo. †P. to Mich. Ter. Became Ind. Co.	1834
30	Indiana	1816	*Mich. Ter., Ind Ter.*	Ind					
31	Alabama Territory	1817	*Miss. Ter*	Ala			1819	Became Ala	1819
32	Mississippi	1817	Miss. Ter	Miss					
33	Illinois	1818	*Ill. Ter*	Ill					
34	(h) Arkansaw Terri'y	1819	*Mo. Ter*	Ark			1836	Became Ark	1836
35	Alabama	1819	Ala. Ter	Ala					
36	Maine	1820	*Mass*	Me					
37	Missouri	1821	*Mo. Ter*	*Mo*	1836	*Ind. Co*			
38	(i) Florida Territory.	1823	E. Fla., W. Fla.	Fla			1845	Became Fla	1845
39	†Indian Country	1834	Mo. Ter	Neb., Or., Ind., Co., Idaho., Wash., Mon., *Mo., Kan., Col., Dak., Wyo.,*			1836 1848 1854 1854	P. to Mo Or. Ter. P. to Neb. Ter. P. to Kan. Ter.	
40	Arkansas	1836	Ark. Ter	Ark					
41	Wisconsin Territory	1836	†*Mich. Ter*	Wis., Ia., Minn., *Dak.*			1838 1848 1849	Ia. Ter Wis Became *Minn. Ter.*	1849
42	Michigan	1837	Mich. Ter	Mich					
43	Iowa Territory	1836	*Wis. Ter*	Ia., Minn., *Dak*	1846	*Ia*	1845 1846 1849	Ia. P. to Ia. Became *Minn. Ter.*	1849
44	Florida	1845	Fla. Ter	Fla					
45	Iowa	1845	*Ia. Ter*	*Ia., Minn*	1846	*Ia. Ter*	1846	P. to Ia. Ter	
46	Texas	1845	Texas	Tex., Unorg. Ter. *Colo., N. M., Kan.*			1850	Tex. Cession	
47	Wisconsin	1848	*Wis. Ter*	Wis					
48	Oregon Territory	1848	*Ind. Co*	Or., Wash., Idaho, *Mon., Wyo.*			1853 1859	Wash Became Or.	1859
49	Minnesota Territory.	1849	Wis. Ter., Ia. Ter.	Minn., *Dak*			1858 1861	Minn Became *Dak.*	1861
50	California	1850	*Mex. Cession, 1848.*	Cal					
51	Utah Territory	1850	*Mex. Cession, 1848.*	Utah, *Nev., Colo., Wyo.*			1861 1861 1861 1866 1868	P. o Colo. Ter. Nev. Ter. P. to Neb. Ter. P. to Nev. P. to Wyo.	
52	(j) Unorganized Territory	1850	*Tex. Cession*	Unorg. Ter.. *Colo., Kan.*			1854	P. to Kan. Ter.	
53	New Mexico Territory.	1850	*Mex. Cession, 1848. Tex. Cession.*	*Nev., Colo., Ariz., N. M.*	1854	Gadsden Purchase	1861 1863	P. to Colo. Ter. Ariz.	
54	Washington Territory.	1853	*Or. Ter*	Wash., Idaho, *Mon., Wyo.*			1861 1863	P. to Neb. Ter. P. to Idaho.	
55	Nebraska Territory	1854	*Ind. Co. Mex. Cession, 1848.*	Neb., *Colo., Wyo., Mon., Dak.*	1861	*Wash. Utah* See Map VI	1861 1861 1863 1867	P. to Colo. Ter. P. to Dak. P. to Idaho. Became Neb.	1867
56	Kansas Territory	1854	*Ind. Co., Unorg. Ter.*	Kan., *Colo.*			1861 1861	Kan Became *Colo. Ter.*	1861
57	Minnesota	1858	*Minn. Ter*	Minn					
58	Oregon	1859	Or. Ter.	Or					
59	Kansas	1861	*Kan. Ter*	Kan					
60	Colorado Territory	1861	Kan. Ter., *Neb., Ter., Utah, N. M.*	Colo			1876	Became Colo	1876
61	Nevada Territory	1861	*Utah*	*Nev*			1864	Became Nev	1864
62	Dakota Territory	1861	Minn. Ter., *Neb. Ter.*	Dak., *Mon., Wyo.*	1864	(l) *Idaho*	1863 1868 1873	P. to Idaho P. to Wyo. P. to Mon.	
63	Arizona Territory	1863	*N. M*	Ariz., *Nev*			1866	P. to Nev	
64	Idaho Territory	1863	*Wash., Dak., Neb. Ter.*	Idaho, Mon., *Wyo.*			1864 1864 1868	Mon (l) P. to Dak. P to Wyo.	
65	West Virginia	1863	*Va*	W. Va					
66	Montana Territory	1864	*Idaho*	*Mon*	1873	*Dak*			
67	Nevada	1864	Nev. Ter	*Nev*	1866	*Ariz., Utah*			
68	Nebraska	1897	Neb. Ter	Neb					
69	Alaska District	1868	Rus'n Cession, 1867	Alaska					
70	Wyoming Territory	1868	*Dak., Utah, Idaho.*	Wyo					
71	Colorado	1876	Colo. Ter	Colo					

†See Note Period VI.
(a) *Italics* denote parts of divisions.
(b) Not on map.—Claims to western territory indefinite and conflicting.
(c) Present divisions not given owing to indefinite boundaries.
(d) Too small to be shown on map—P. denotes part.
(e) Styled Territory of the United States South of the State of Tennessee from 1796 to 1802.
(f) Subject to the claims of Georgia.
(g) District of Louisiana committed to the officers of Indiana Territory.
(h) Modifications of the western boundary were made in 1824 and 1828
(i) Territorial governments were formed for East and West Florida in 1822.
(j) Same as Texas Cession after formation of New Mexico.
(k) Including Mississippi Territory.
(l) All of present Territory of Wyoming east of the Rocky Mountains.

CESSIONS TO THE GENERAL GOVERNMENT.

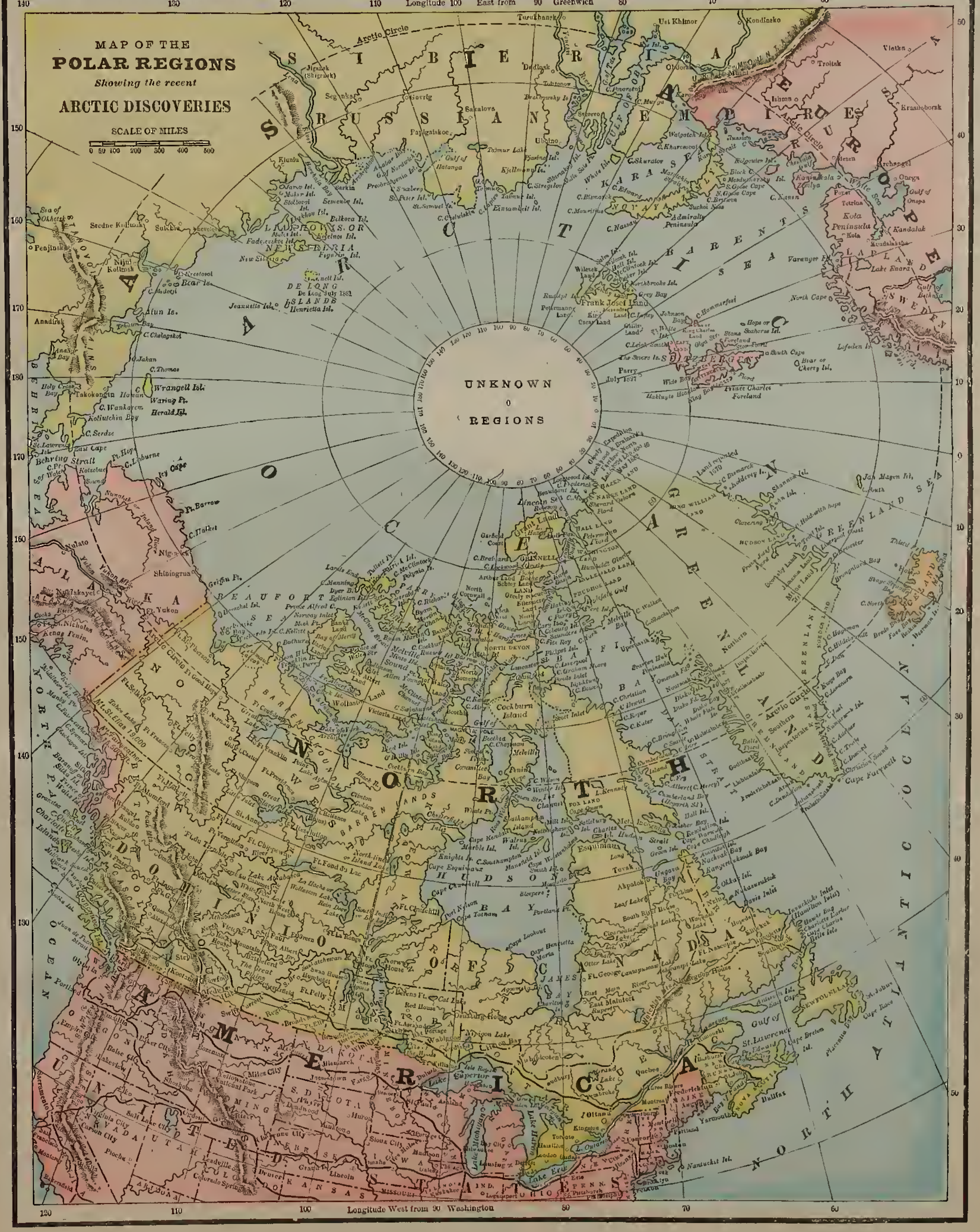
Year.	State.	Map.
1781	New York. See Note (b)	
1784	Virginia	IV.
1785	Massachusetts	IV.
1786	Connecticut	IV.
1787	South Carolina	IV.
1790	North Carolina	V.
1802	Georgia	V.

CESSIONS TO THE UNITED STATES BY FOREIGN NATIONS.

Year.	Territory.	Country.	Map.
1783	Original Territory	Great Britain	IV.
1803	Louisiana	France	VI.
1819	Florida	Spain	V.
1845	Texas	(Tex. annexed.)	VI.
1848	Part of Mexico	Mexico	VI.
1853	Part of Mexico	Mexico	VI.
1867	Alaska	Russia	VIII.

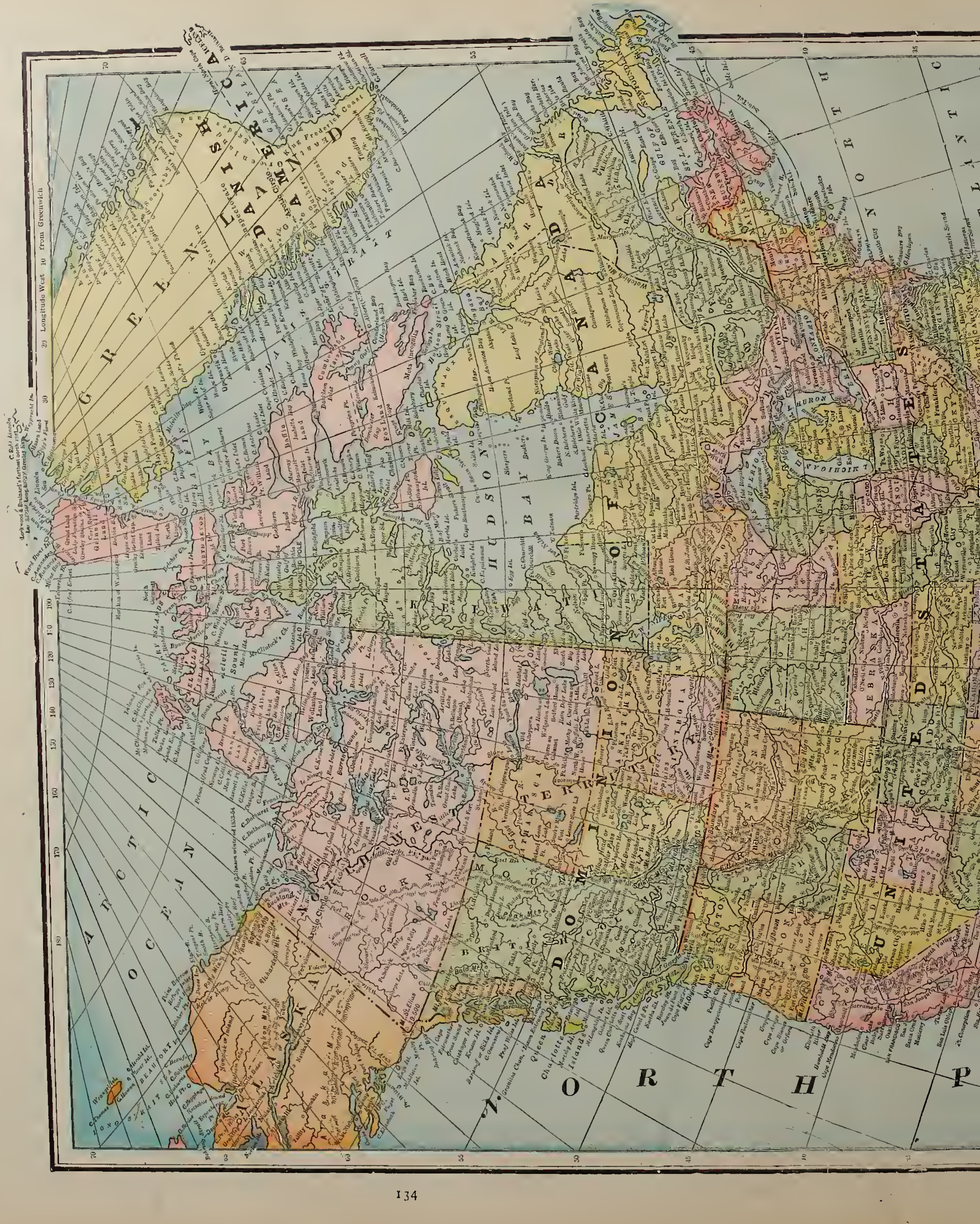
*This Table has a direct relation to the formation of territorial divisions and the formations and changes indicated by the parallel lines on the maps; also to the chronological tables. The dates will serve as an index.

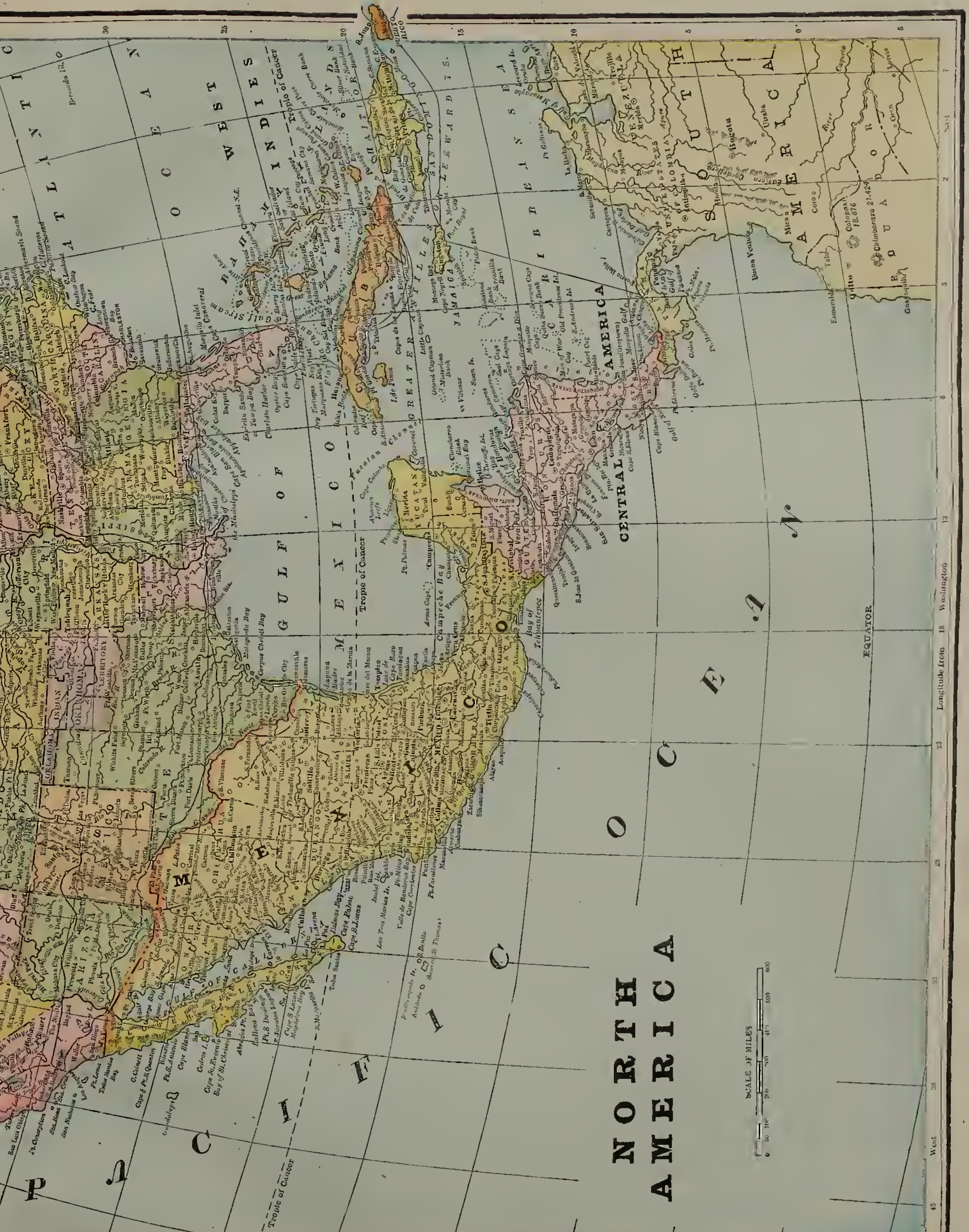
NOTE.—The above table and its relation to the maps will be better understood by observance of the following rules: 1. Names of divisions and the parallel lines covering them extend in the same direction, except where otherwise plainly distinguishable. 2. Where there is a difference in the spacing, divisions covered by the narrow spaces are annexed to those covered by the wider.

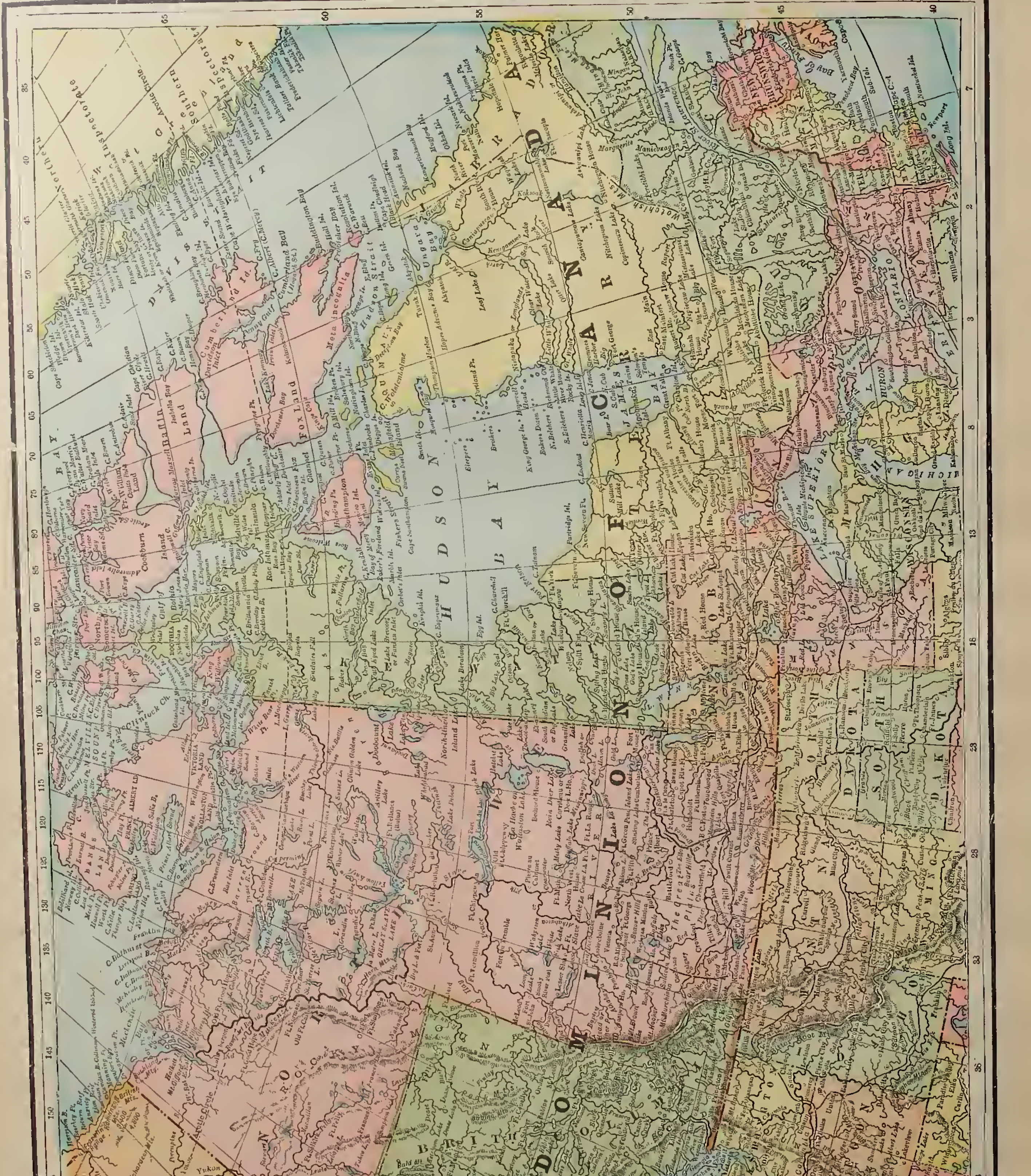


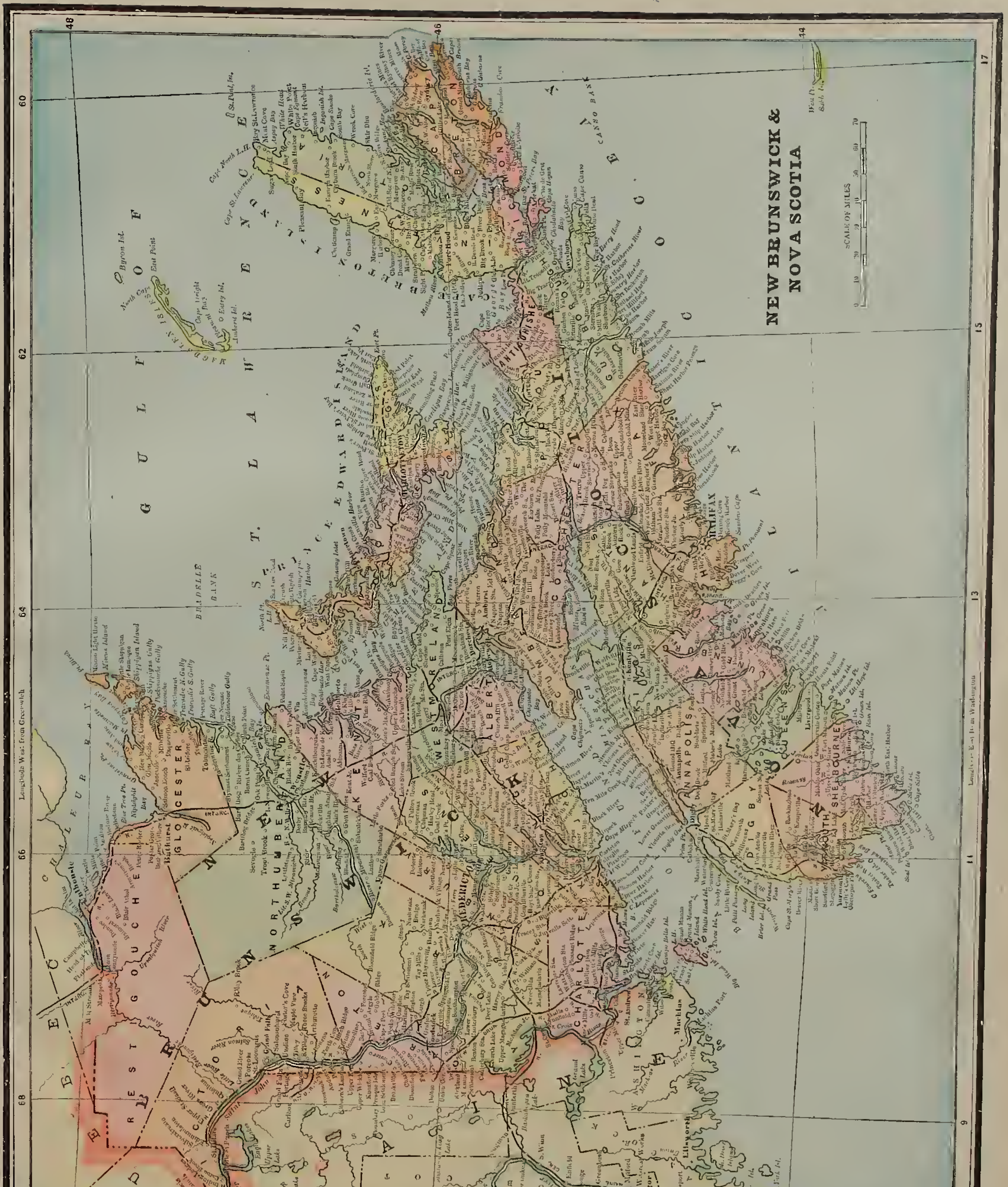
MAP OF THE
POLAR REGIONS
Showing the recent
ARCTIC DISCOVERIES

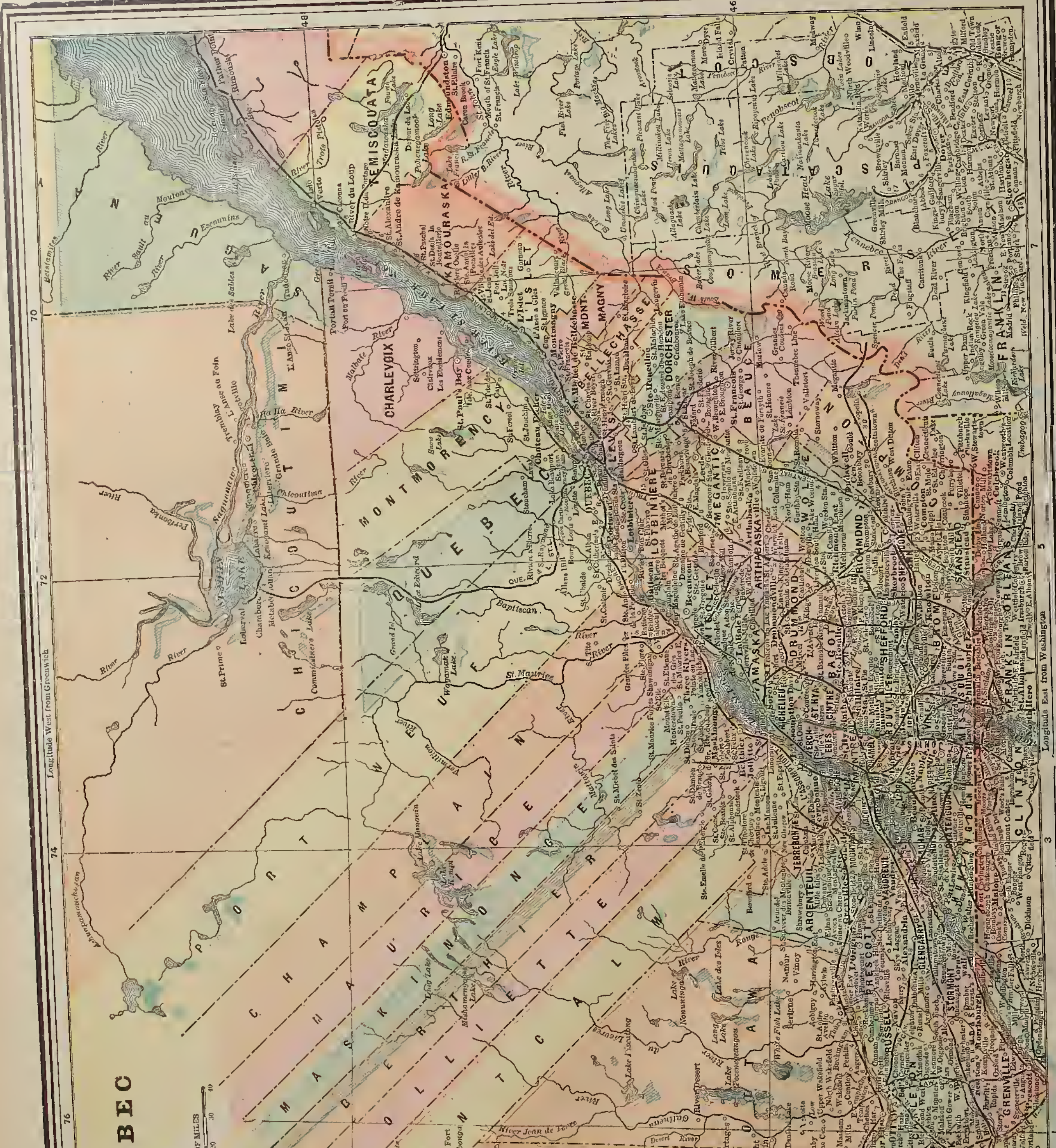
SCALE OF MILES
0 50 100 200 300 400 500
Longitude 100 East from 90 Greenwich
Longitude West from 90 Washington
UNKNOWN
REGIONS
SIBERIA
RUSSIAN EMPIRE
ASIA
EUROPE
ARCTIC
OCEAN
KARA SEA
BARENTS SEA
GREENLAND
GREENLAND SEA
BAFFIN BAY
DAVIS STRAIT
BEAUFORT SEA
HUDSON BAY
NORTH AMERICA
DOMINION OF CANADA
ALASKA
UNITED STATES
NORTH ATLANTIC OCEAN
NORTH PACIFIC OCEAN
BEHRING SEA
Behring Strait
Arctic Circle
LIAKHOV IS. OR NEW SIBERIA
DE LONG ISLANDS
Jeannette Isl.
Henrietta Isl.
Wrangell Isl.
Herald Isl.
Frank Josef Land
NOVAYA ZEMLYA
SPITZBERGEN
Parry July 1827
Lockwood & Brainard's Farthest North May 1882
Grinnell Land
Lincoln Sea
Cockburn Island
Fox Land
Baffin Land
Barren Grounds
Lapland
Sweden
Kola Peninsula
Jan Mayen Isl.
Newfoundland
Gulf of St. Lawrence
Lake Superior
Lake Michigan
Lake Huron
Lake Erie
Lake Ontario
James Bay
Labrador
Ft. Yukon
Pt. Barrow
Archangel
Yukon River

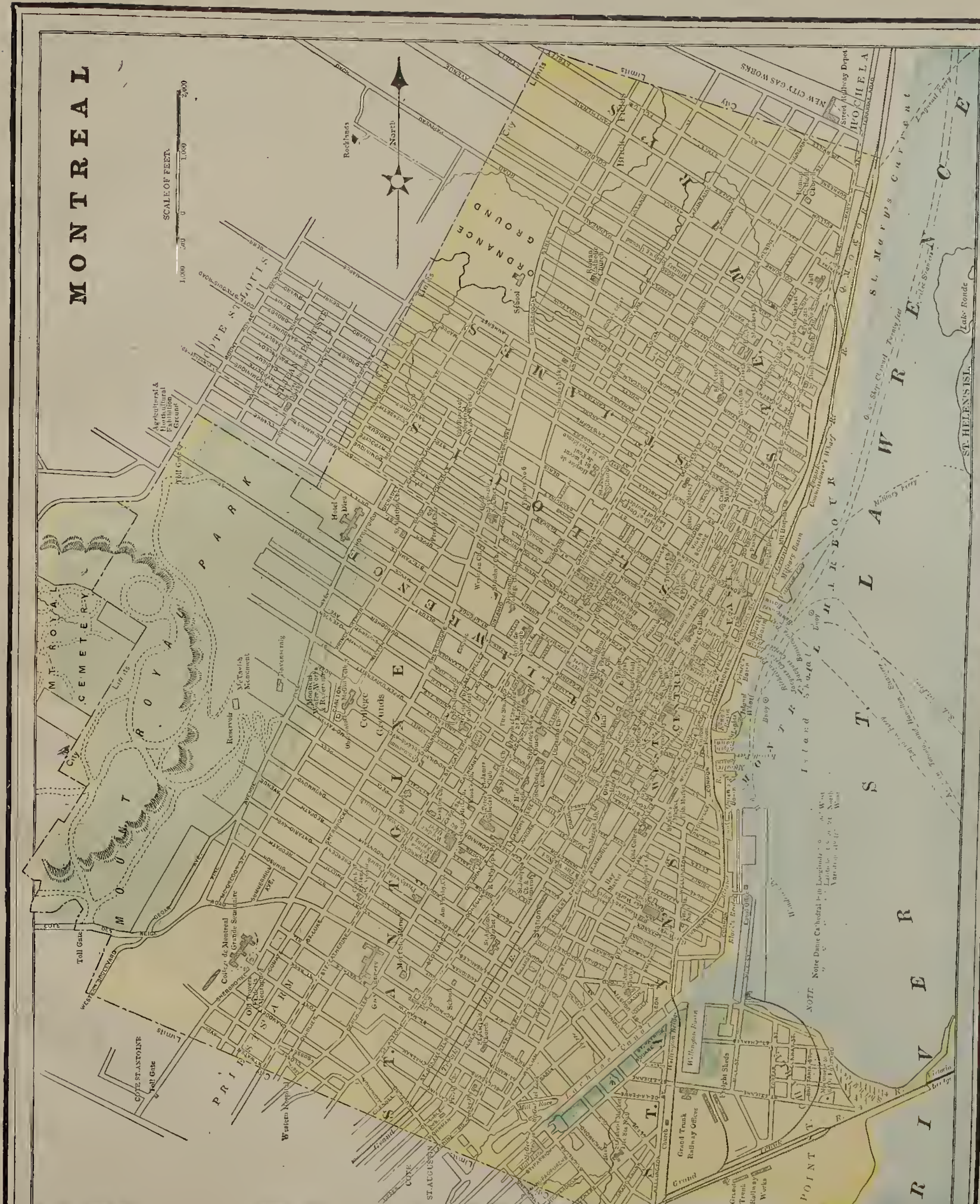

Longitude West 10 from Greenwich
GREENLAND
DANISH AMERICA
King Frederick Coast
ARCTIC OCEAN
BAFFIN BAY
HUDSON BAY
LABRADOR
DOMINION OF CANADA
KEEWATIN
ROCKY MTS.
ALASKA
BRITISH COLUMBIA
UNITED STATES
NORTH PACIFIC
NORTH ATLANTIC
Arctic Circle

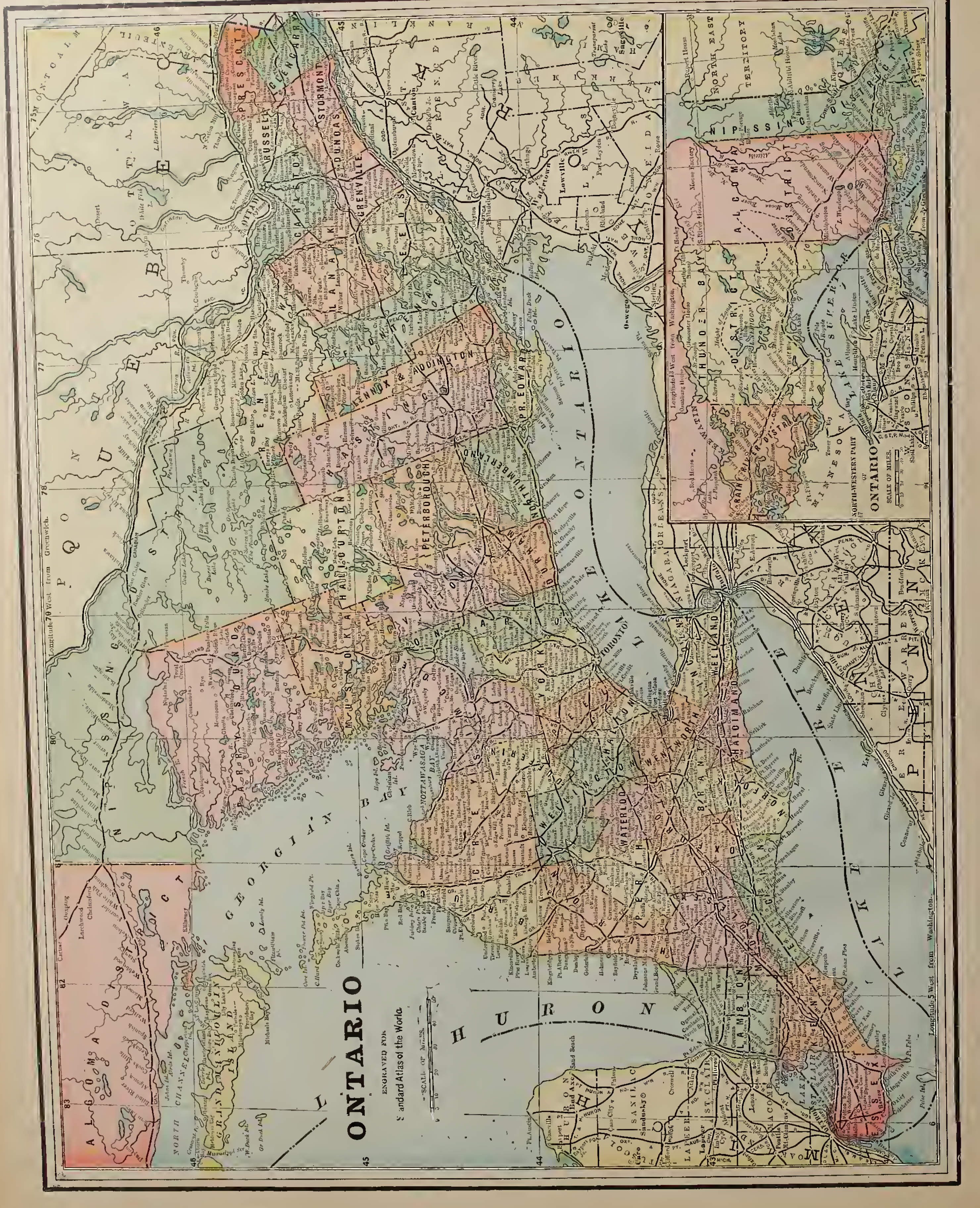

NORTH AMERICA
SCALE OF MILES
GULF OF MEXICO
CENTRAL AMERICA
WEST INDIES
CARIBBEAN SEA
ATLANTIC OCEAN
PACIFIC OCEAN
SOUTH AMERICA
Tropic of Cancer
EQUATOR
Longitude from Washington


DOMINION OF CANADA
HUDSON BAY
JAMES BAY
LABRADOR
UNGAVA BAY
HUDSON STRAIT
DAVIS STRAIT
BAFFIN LAND
BRITISH COLUMBIA
LAKE SUPERIOR
LAKE HURON
LAKE MICHIGAN
ONTARIO
NORTH DAKOTA
SOUTH DAKOTA
MONTANA
WYOMING
IDAHO
OREGON
WASHINGTON
NEW BRUNSWICK
Arctic Circle
Yukon


NEW BRUNSWICK & NOVA SCOTIA
SCALE OF MILES
0 10 20 30 40 50 60 70
GULF OF ST. LAWRENCE
ATLANTIC OCEAN
PRINCE EDWARD ISLAND
CAPE BRETON ISLAND
MAGDALEN ISLES
CHALEUR BAY
BAY OF FUNDY
QUEBEC
MAINE
HALIFAX
Longitude West from Greenwich
Longitude East from Washington
48
46
44
60
62
64
66
68
9
11
13
15
17


QUEBEC
SCALE OF MILES
0 5 10 20 30 40
Longitude West from Greenwich
Longitude East from Washington
76
74
72
70
48
46
1
3
5
7
PONTIAC
CHAMPLAIN
MASKINONGÉ
BERTHIER
JOLIETTE
L'ASSOMPTION
MONTCALM
OTTAWA
ARGENTEUIL
TERREBONNE
QUEBEC
MONTMORENCY
CHARLEVOIX
CHICOUTIMI
SAGUENAY
KAMOURASKA
TEMISCOUATA
L'ISLET
MONTMAGNY
BELLECHASSE
DORCHESTER
BEAUCE
LEVIS
LOTBINIÈRE
MEGANTIC
ARTHABASKA
NICOLET
DRUMMOND
RICHMOND
WOLFE
COMPTON
SHERBROOKE
STANSTEAD
BROME
SHEFFORD
BAGOT
ST. HYACINTHE
ROUVILLE
IBERVILLE
MISSISQUOI
ST. JOHNS
NAPIERVILLE
HUNTINGDON
CHATEAUGUAY
BEAUHARNOIS
SOULANGES
VAUDREUIL
PRESCOTT
RUSSELL
GLENGARRY
STORMONT
DUNDAS
GRENVILLE
CARLETON
LANARK
FRANKLIN
CLINTON
ST. LAWRENCE
OXFORD
SOMERSET
PISCATAQUIS
AROOSTOOK
Lake St. John
Saguenay River
St. Maurice River
Ottawa River
Gatineau River
Three Rivers
Montreal
Quebec
Sherbrooke
Ottawa
Chicoutimi

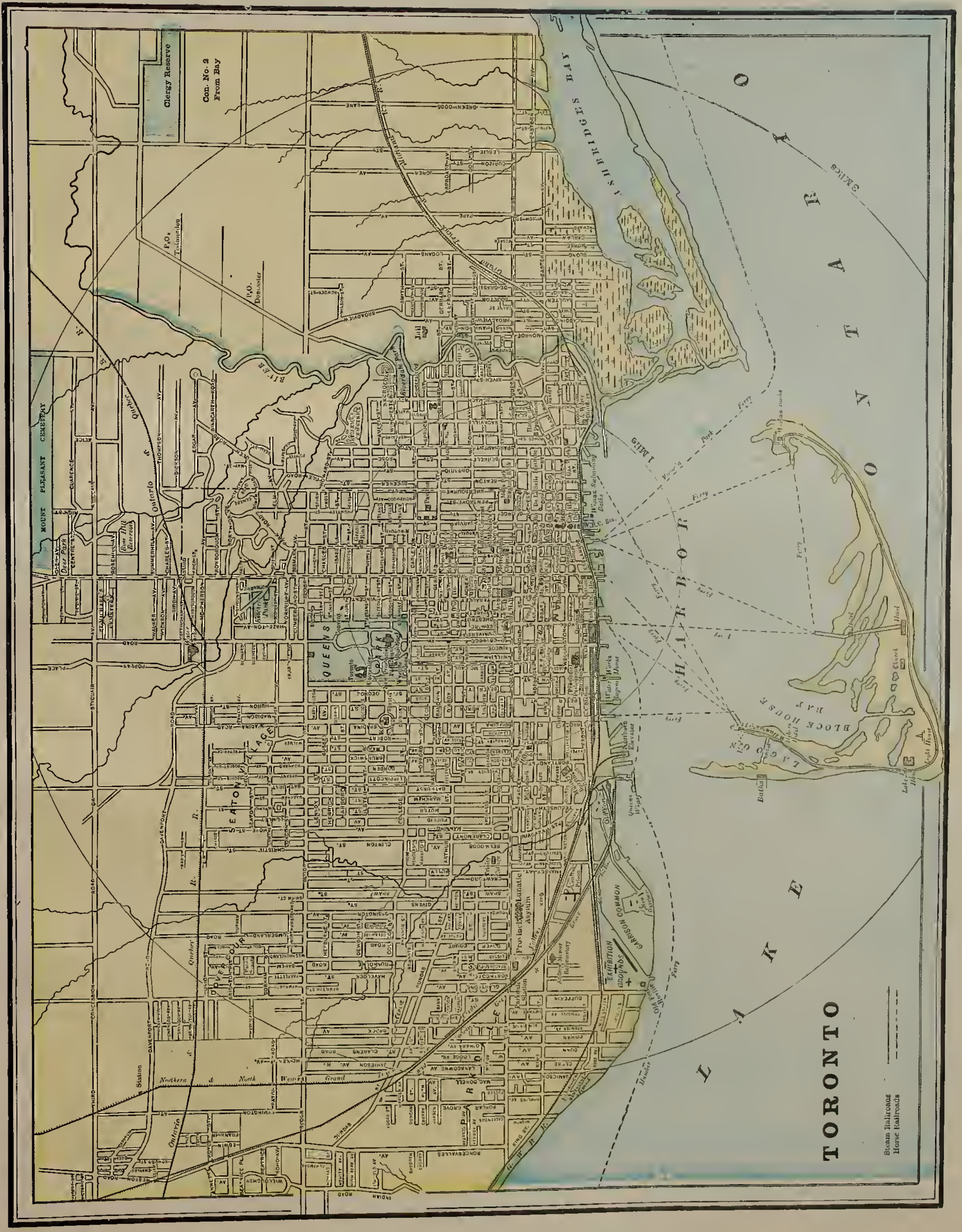

MONTREAL
SCALE OF FEET.
North
MOUNT ROYAL PARK
MT. ROYAL CEMETERY
ST. ANTOINE
ST. LAWRENCE
ST. LOUIS
ST. MARY
ST. ANN
ST. JAMES
WEST
CENTRE
EAST
ORDNANCE GROUND
COTE ST. LOUIS
COTE ST. ANTOINE
PRIESTS FARM
HOCHELAGA
POINT ST. CHARLES
ST. HELEN'S ISL.
Lake Ronde
ST. MARY'S CURRENT
HARBOUR
RIVER ST. LAWRENCE
Island Shoal
NEW CITY GAS WORKS
Street Railway Depot
Rocklands
Agricultural & Horticultural Exhibition Grounds
Hotel Dieu
College Grounds
Reservoir
McTavish Monument
Toll Gate
College de Montreal Grande Seminaire
Western Hospital
Grand Trunk Railway Offices
Grand Trunk Railway Works
Wellington Basin
Canal Office
Victoria Bridge
Military Ferry
Longueuil Ferry
Commissioners Wharf
Jail
City Limits



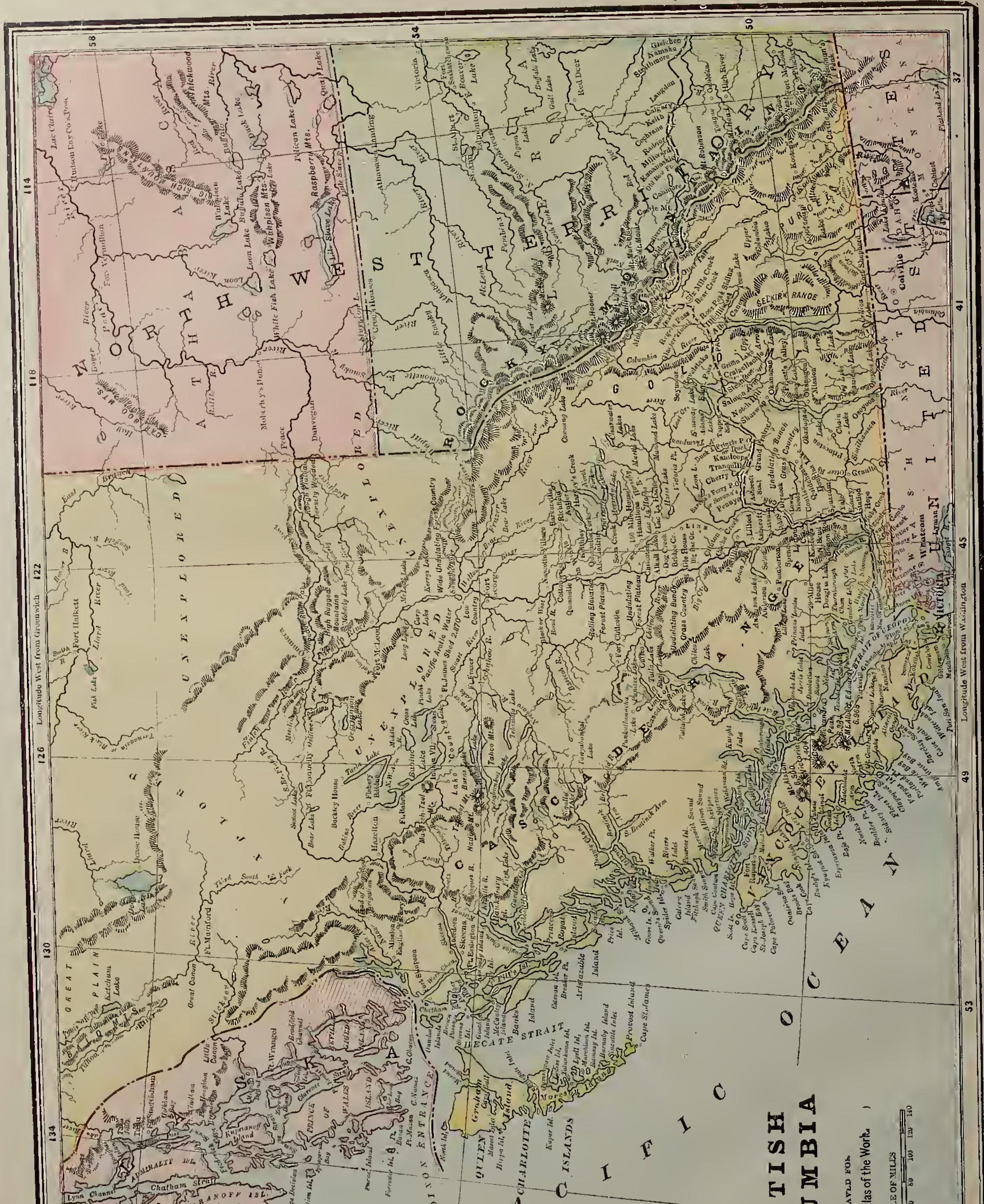
ONTARIO

ENGRAVED FOR Standard Atlas of the World

SCALE OF MILES
L. ONTARIO
L. ERIE
L. HURON
GEORGIAN BAY
TORONTO
QUEBEC
NIPISSING DIST.
ALGOMA DIST.
NEW YORK
PENNSYLVANIA
MICHIGAN
NORTH-WESTERN PART OF ONTARIO
SCALE OF MILES
L. SUPERIOR
THUNDER BAY DIST.
RAINY RIVER DIST.
NORTH EAST TERRITORY
MINNESOTA
WISCONSIN
Longitude 79 West from Greenwich
Longitude 5 West from Washington



TORONTO
Steam Railroads
Horse Railroads
LAKE
ONTARIO
HARBOR
ASHBRIDGES BAY
BLOCK HOUSE BAY
LAGOON
MOUNT PLEASANT CEMETERY
Clergy Reserve
Con. No. 2 From Bay
QUEENS PARK
SEATON VILLAGE
DOVERCOURT
PARKDALE
GARRISON COMMON
EXHIBITION GROUNDS
Provincial Lunatic Asylum
River
1 Mile
2 Miles



BRITISH COLUMBIA
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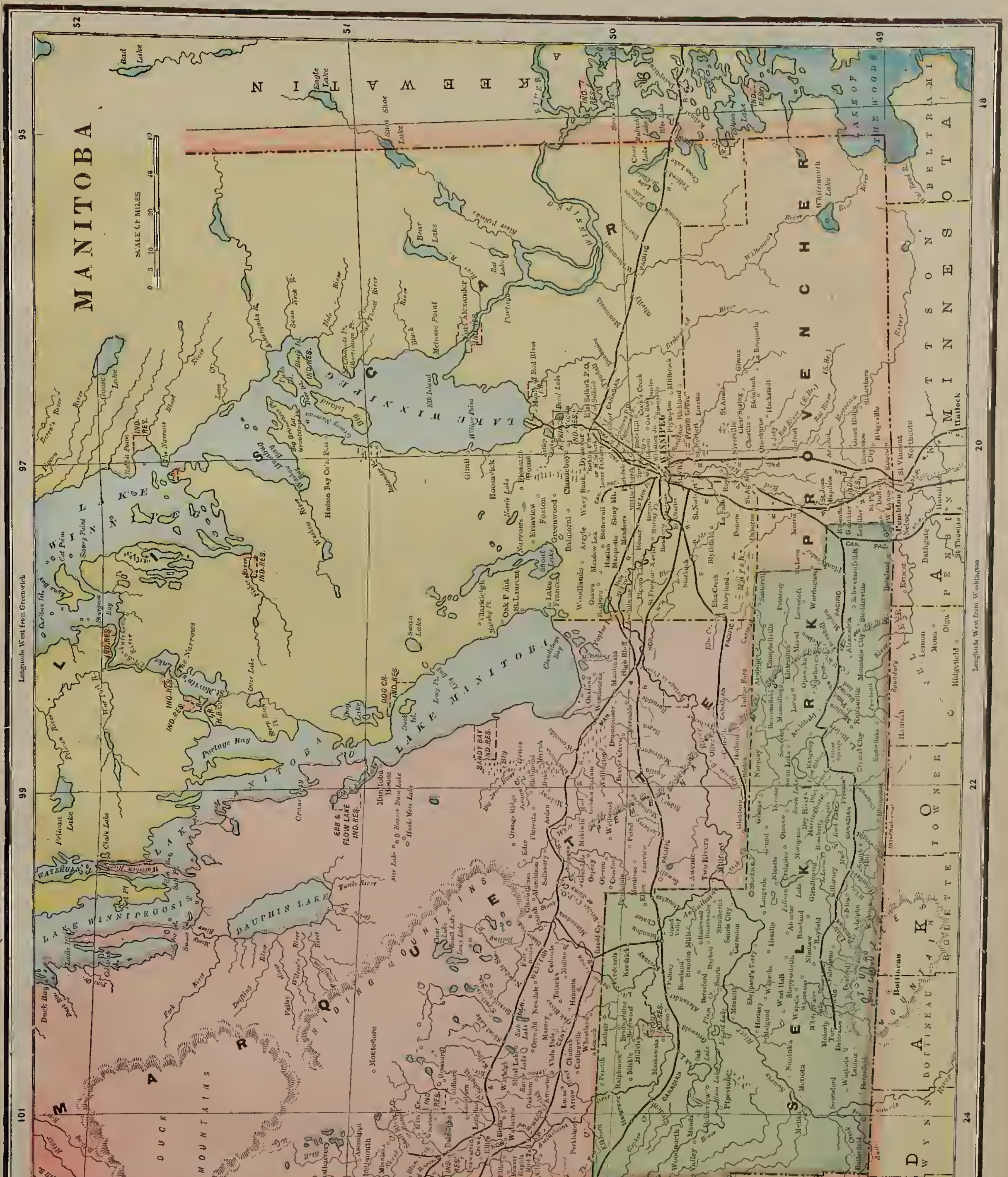
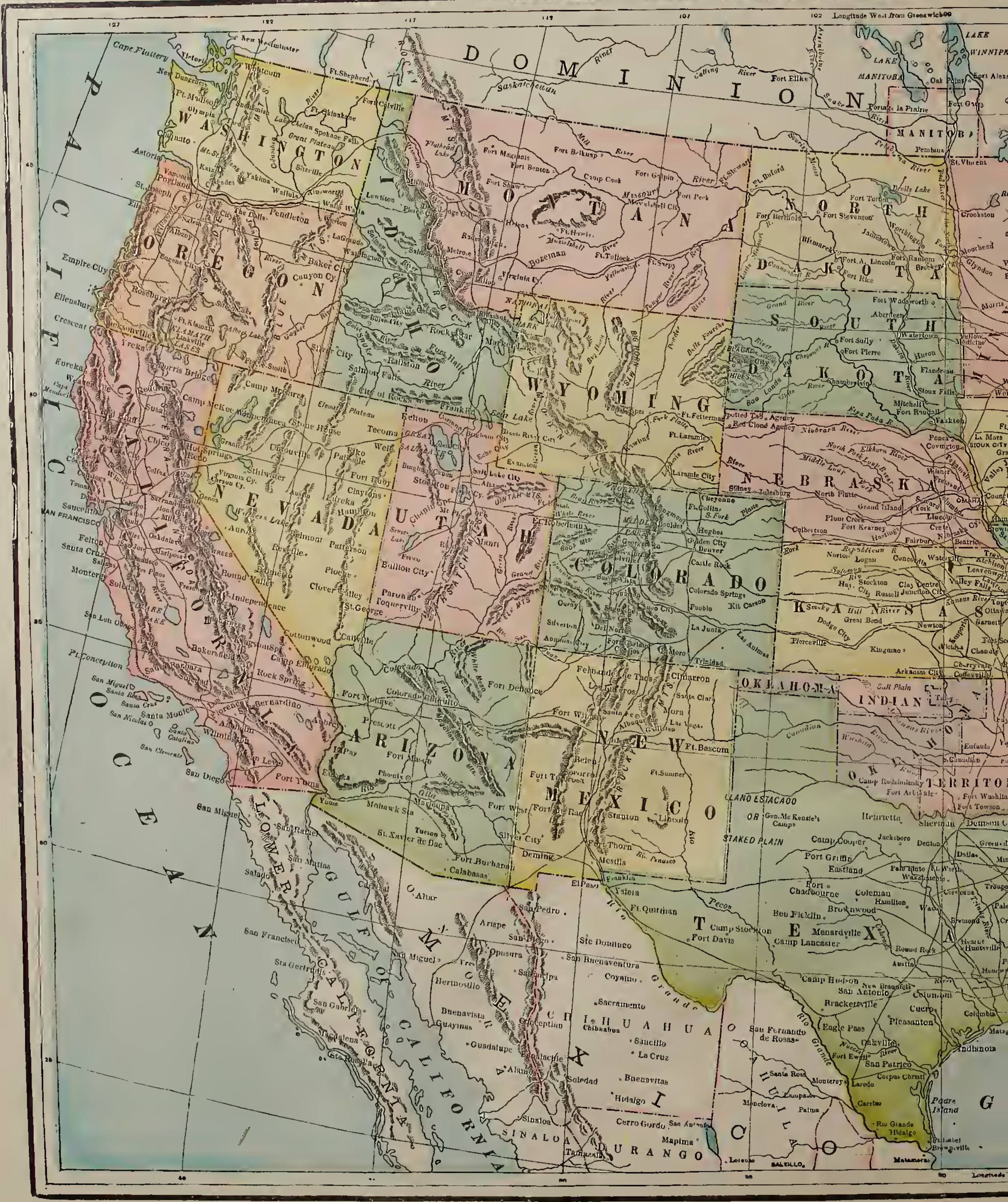
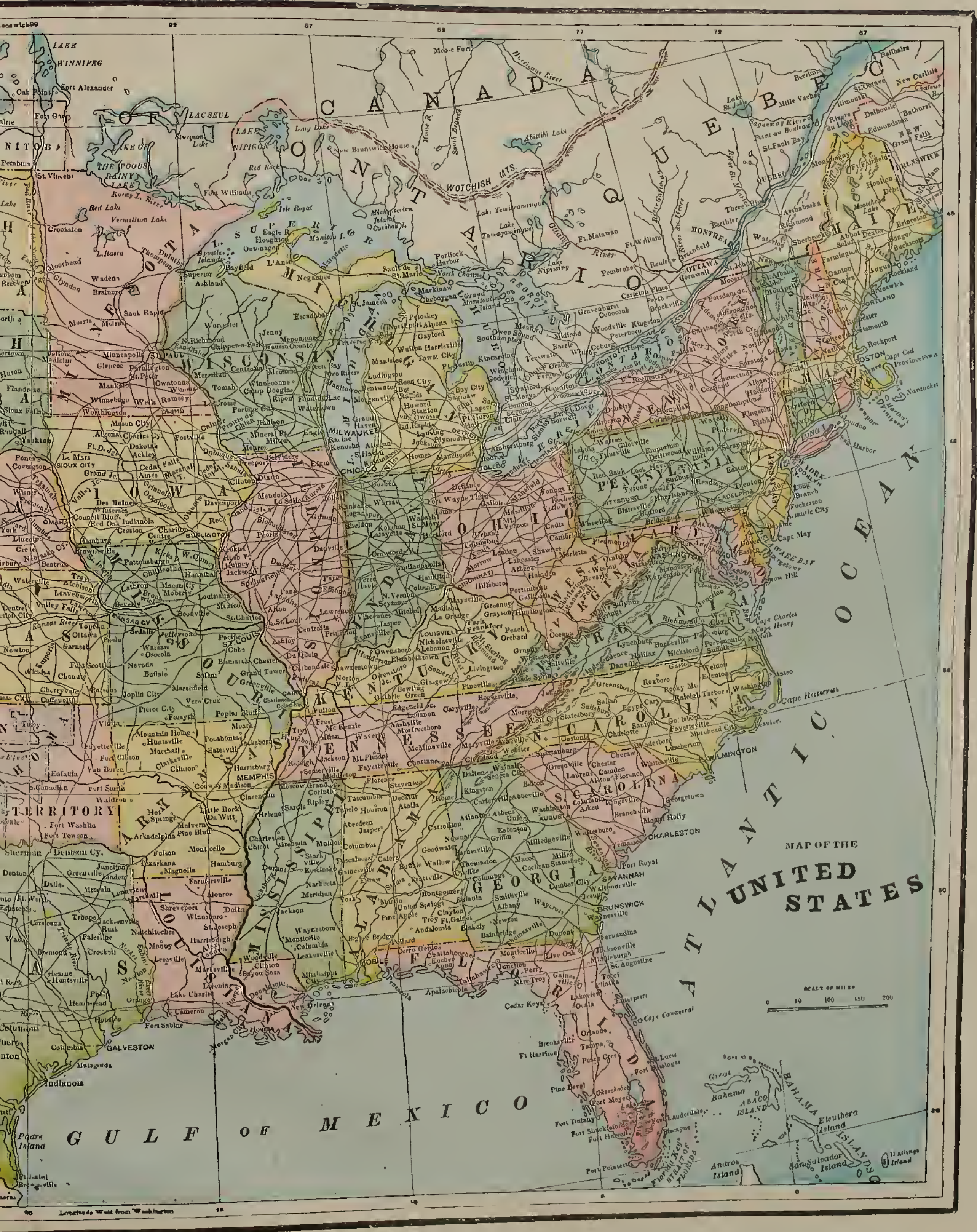
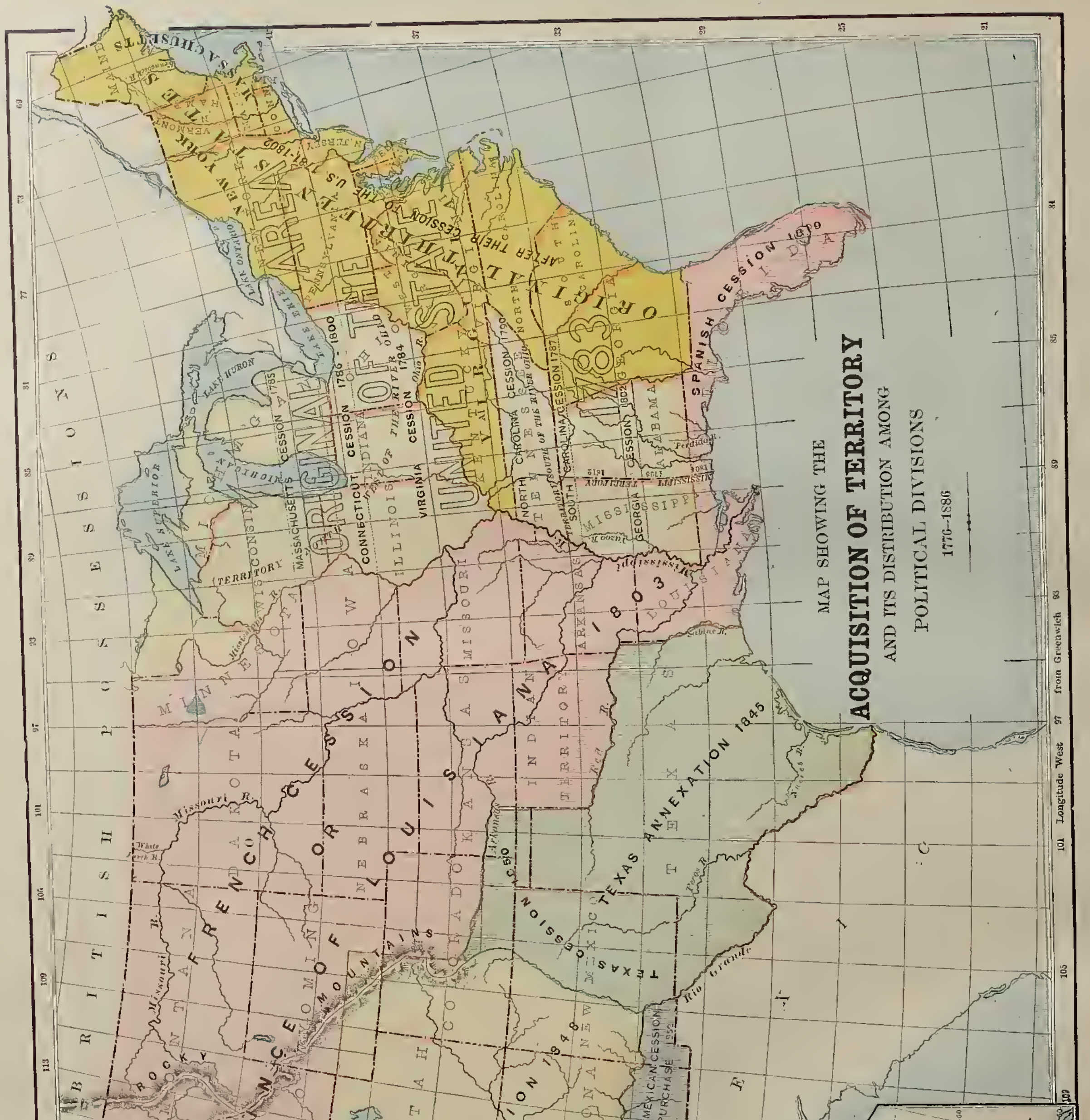
Standard Atlas of the World.
SCALE OF MILES
Longitude West from Greenwich
Longitude West from Washington
NORTH WEST TERRITORY
UNEXPLORED
ROCKY MOUNTAINS
CASCADE RANGE
GOLD RANGE
SELKIRK RANGE
PURCELL RANGE
ALASKA
UNITED STATES
NORTH PACIFIC OCEAN
QUEEN CHARLOTTE ISLANDS
HECATE STRAIT
DIXON ENTRANCE
VANCOUVER ISLAND
STRAIT OF GEORGIA
VICTORIA
PRINCE OF WALES ISLAND
BARANOFF ISL.
ADMIRALTY ISL.
CHICHAGOF ISLAND
SITKA

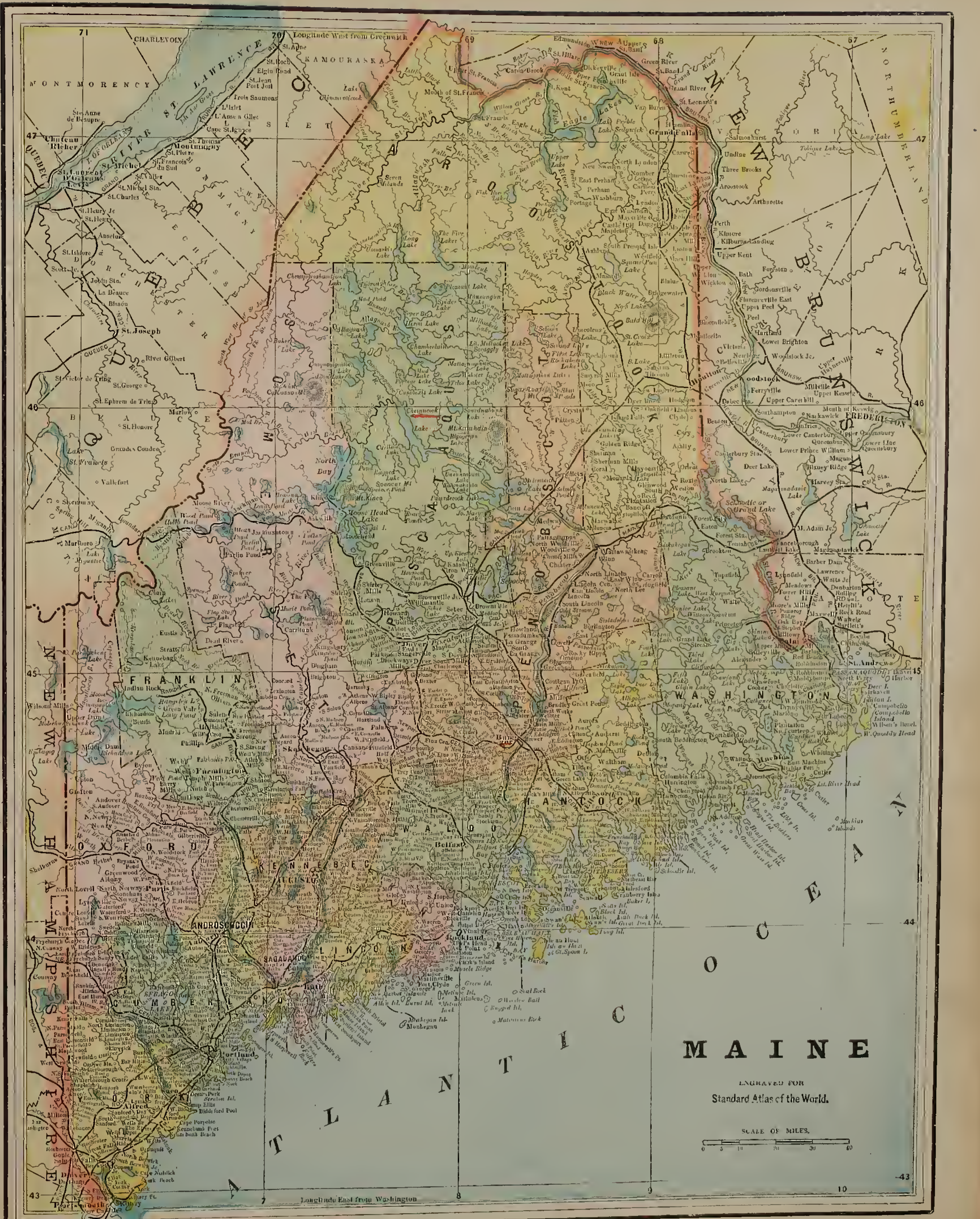

MANITOBA
SCALE OF MILES
0 5 10 20 30 40
Longitude West from Greenwich
Longitude West from Washington
KEEWATIN
LAKE WINNIPEG
LAKE MANITOBA
LAKE WINNIPEGOSIS
DAUPHIN LAKE
LAKE OF THE WOODS
DUCK MOUNTAINS
RIDING MOUNTAINS
MARQUETTE
SELKIRK
PROVENCHER
LISGAR
WINNIPEG
Portage Bay
Duck Bay
Pelican Lake
Waterhen
Sturgeon Bay
Fisher River
Gimli
Hudson Bay Co's Post
Bear Lake
Rat Lake
Port Alexander
Shoal Lake
Swan Lake
Dog Lake
Whitemouth Lake
St Vincent
Pembina
Emerson
Hallock
DAKOTA
MINNESOTA
CANADIAN PACIFIC
52
51
50
49
101
99
97
95
24
22
20
18


Longitude West from Greenwich
DOMINION
PACIFIC OCEAN
WASHINGTON
OREGON
CALIFORNIA
IDAHO
NEVADA
UTAH
ARIZONA
MONTANA
WYOMING
COLORADO
NEW MEXICO
NORTH DAKOTA
SOUTH DAKOTA
NEBRASKA
KANSAS
OKLAHOMA
INDIAN TERRITORY
TEXAS
MEXICO
CHIHUAHUA
COAHUILA
SINALOA
DURANGO
LOWER CALIFORNIA
GULF OF CALIFORNIA
MANITOBA
LAKE MANITOBA
LAKE WINNIPEG
Cape Flattery
Victoria
New Westminster
Olympia
Astoria
Portland
Salem
Walla Walla
Yakima
Spokane Falls
Lewiston
Baker City
Canyon City
Pendleton
The Dalles
Empire City
Roseburg
Jacksonville
Crescent City
Eureka
Yreka
Redding
Chico
Sacramento
SAN FRANCISCO
San Jose
Santa Cruz
Monterey
Stockton
Fresno
Visalia
Bakersfield
San Luis Obispo
Santa Barbara
Pt. Conception
Santa Monica
Wilmington
San Bernardino
San Diego
Fort Yuma
Reno
Carson Cy.
Virginia Cy.
Winnemucca
Austin
Eureka
Elko
Pioche
Hamilton
Salt Lake City
Ogden
Provo
St. George
Helena
Fort Benton
Virginia Cy.
Bozeman
Boise City
Yellowstone National Park
Cheyenne
Laramie City
Evanston
Denver
Boulder
Colorado Springs
Pueblo
Leadville
Trinidad
Santa Fe
Albuquerque
Las Vegas
Silver City
Mesilla
El Paso
Prescott
Phoenix
Tucson
Yuma
Fort Mohave
Bismarck
Fargo
Pembina
Deadwood
Pierre
Yankton
Sioux Falls
Omaha
Lincoln
North Platte
Kearney
Topeka
Great Bend
Dodge City
San Antonio
Austin
Laredo
Corpus Christi
Brownsville
Fort Davis
Chihuahua
Hermosillo
Guaymas
Matamoros
Monterey
Saltillo
Llano Estacado or Staked Plain


MAP OF THE
UNITED
STATES
CANADA
ONTARIO
QUEBEC
NEW BRUNSWICK
MAINE
NEW YORK
PENNSYLVANIA
OHIO
MICHIGAN
WISCONSIN
MINNESOTA
IOWA
ILLINOIS
INDIANA
MISSOURI
KENTUCKY
TENNESSEE
WEST VIRGINIA
VIRGINIA
MARYLAND
N. CAROLINA
S. CAROLINA
GEORGIA
ALABAMA
MISSISSIPPI
LOUISIANA
ARKANSAS
FLORIDA
TERRITORY
L. SUPERIOR
LAKE WINNIPEG
LAKE OF THE WOODS
WOTCHISH MTS.
ATLANTIC OCEAN
GULF OF MEXICO
BAHAMA ISLANDS
STRAIT OF FLORIDA
Cape Hatteras
Cape Canaveral
CHICAGO
MILWAUKEE
DETROIT
ST. LOUIS
LOUISVILLE
CINCINNATI
PITTSBURG
PHILADELPHIA
NEW YORK
BOSTON
WASHINGTON
MEMPHIS
NEW ORLEANS
MOBILE
SAVANNAH
CHARLESTON
WILMINGTON
MONTREAL
QUEBEC
OTTAWA
TORONTO
GALVESTON
SCALE OF MILES
0 50 100 150 200
Longitude West from Washington


MAP SHOWING THE ACQUISITION OF TERRITORY AND ITS DISTRIBUTION AMONG POLITICAL DIVISIONS 1776–1886

ORIGINAL AREA OF THE UNITED STATES 1783
ORIGINAL THIRTEEN STATES AFTER THEIR CESSION TO THE U.S. 1781–1802
BRITISH POSSESSIONS
FRENCH CESSION OR PROVINCE OF LOUISIANA 1803
SPANISH CESSION 1819
TEXAS ANNEXATION 1845
TEXAS CESSION 1850
FIRST MEXICAN CESSION 1848
SECOND MEXICAN CESSION OR GADSDEN PURCHASE 1853
RUSSIAN CESSION 1867
ALASKA
MASSACHUSETTS CESSION 1785
CONNECTICUT CESSION 1786–1800
VIRGINIA CESSION 1784
NORTH CAROLINA CESSION 1790
SOUTH CAROLINA CESSION 1787
GEORGIA CESSION 1802
TERRITORY NORTH WEST OF THE RIVER OHIO
TERRITORY SOUTH OF THE RIVER OHIO
INDIAN TERRITORY
ROCKY MOUNTAINS
Bitter Root Mts.
MEXICO
GULF OF MEXICO
PACIFIC OCEAN
ARCTIC OCEAN
BEHRING SEA
Mt. St. Elias
Longitude West from Greenwich


Longitude West from Greenwich
71
70
69
68
67
47
46
45
44
43
QUEBEC
NEW BRUNSWICK
NORTHUMBERLAND
VICTORIA
CHARLEVOIX
MONTMORENCY
KAMOURASKA
L'ISLET
MONTMAGNY
BELLECHASSE
DORCHESTER
BEAUCE
COMPTON
YORK
CHARLOTTE
NEW HAMPSHIRE
AROOSTOOK
PISCATAQUIS
PENOBSCOT
SOMERSET
FRANKLIN
OXFORD
ANDROSCOGGIN
KENNEBEC
WALDO
HANCOCK
WASHINGTON
LINCOLN
SAGADAHOC
CUMBERLAND
ST. LAWRENCE RIVER
FREDERICTON
Portland
Augusta
Bangor
Belfast
Rockland
ATLANTIC OCEAN
Longitude East from Washington
7
8
9
10
SCALE OF MILES
0
5
10
20
30
40

MAINE

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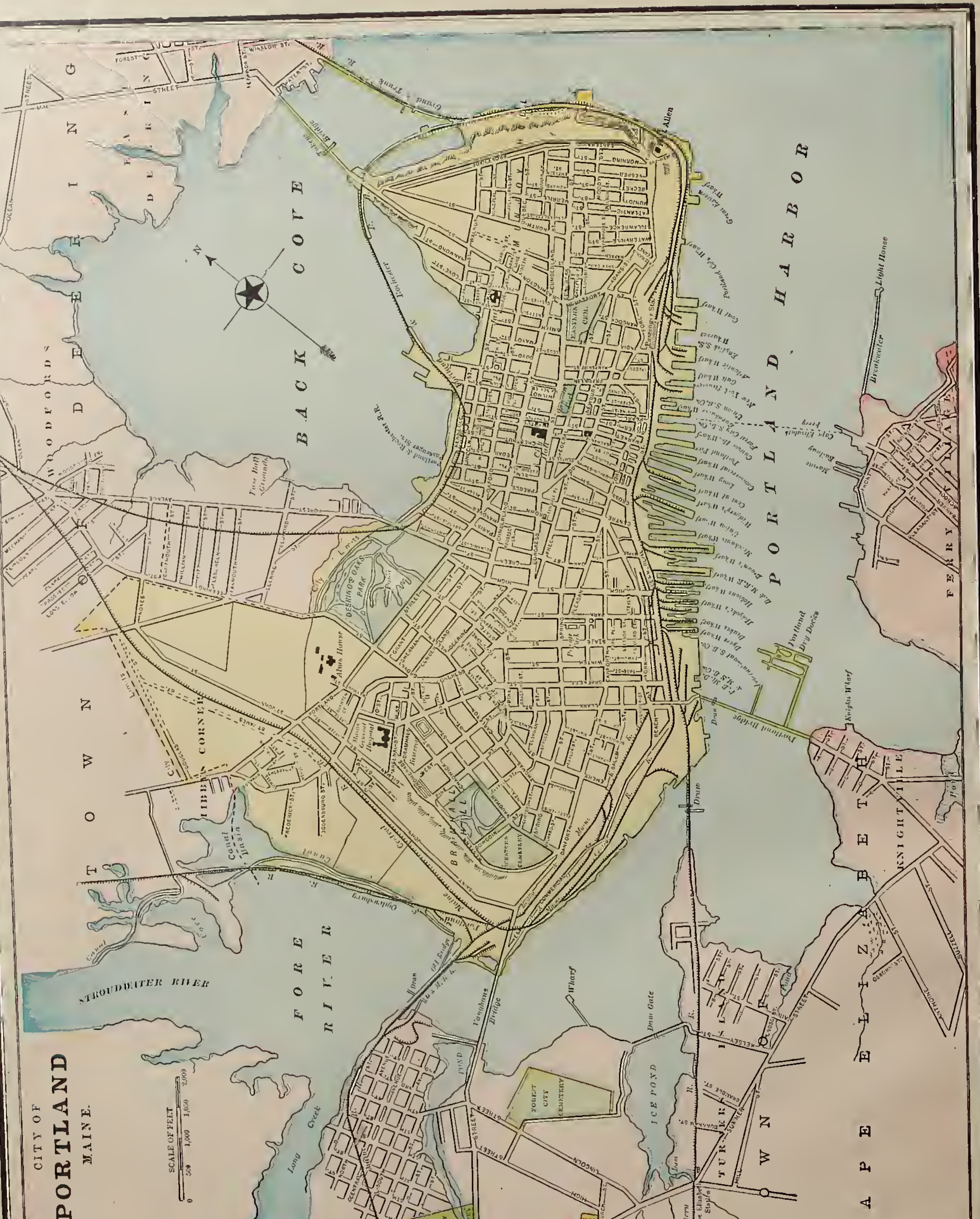
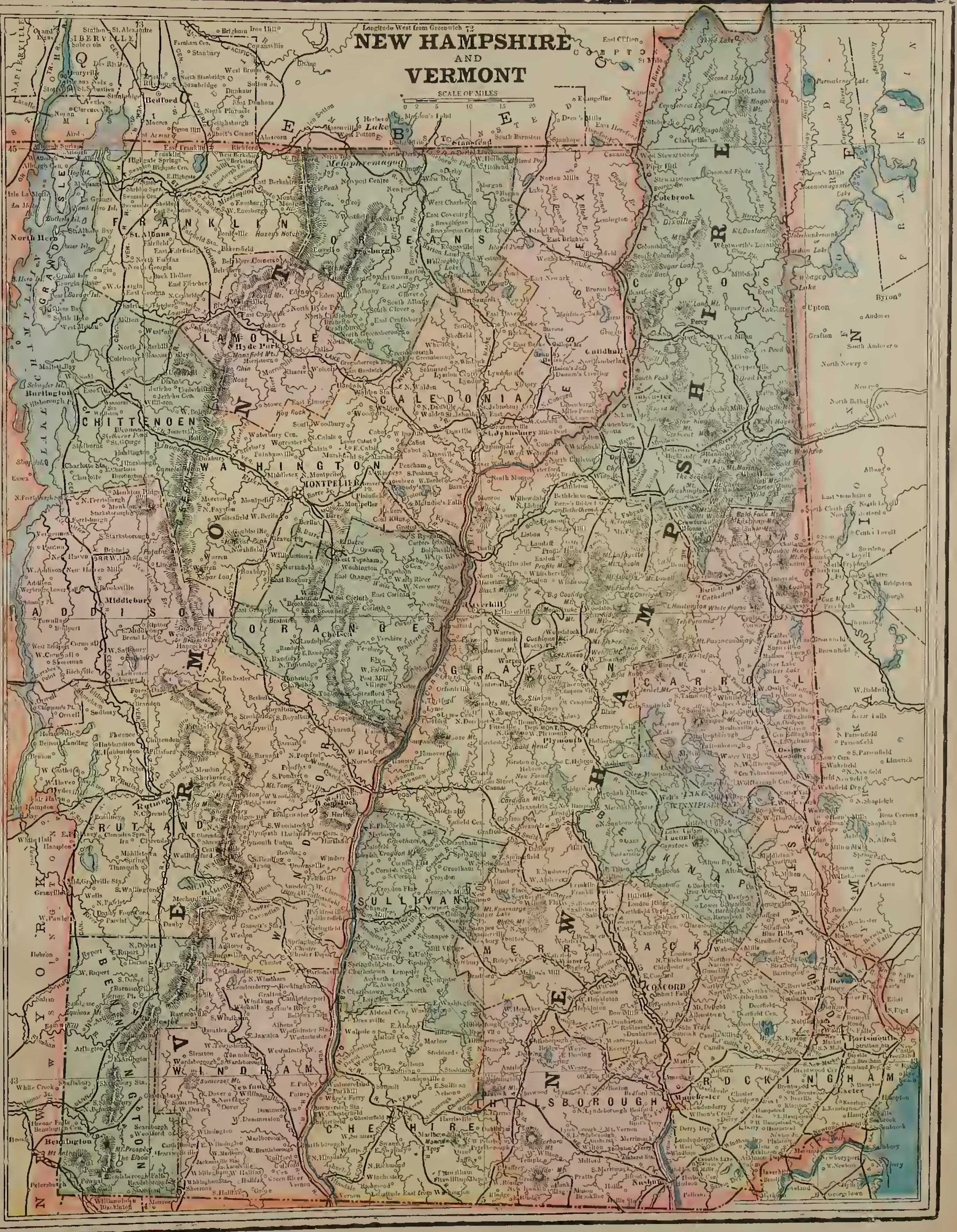


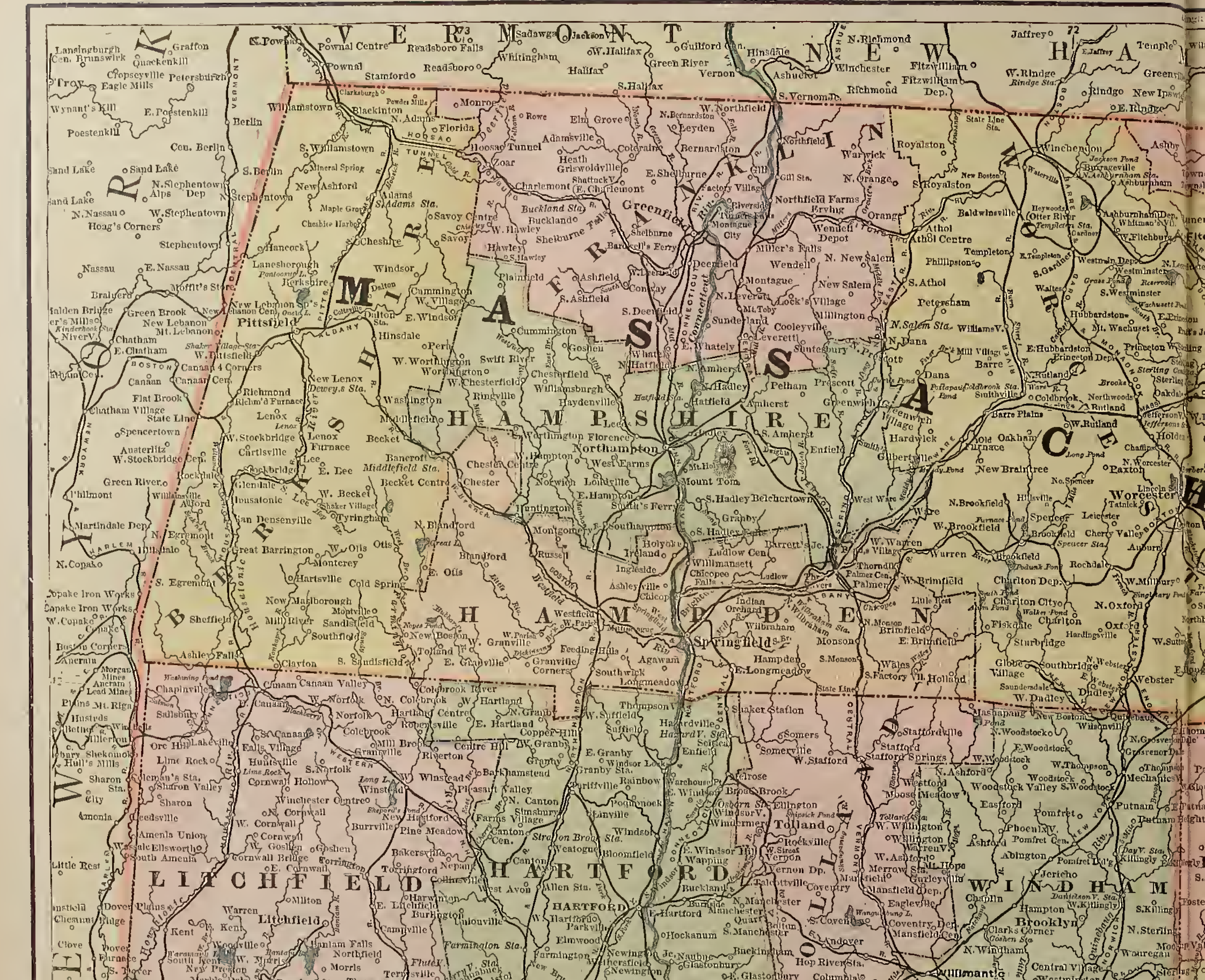
CITY OF

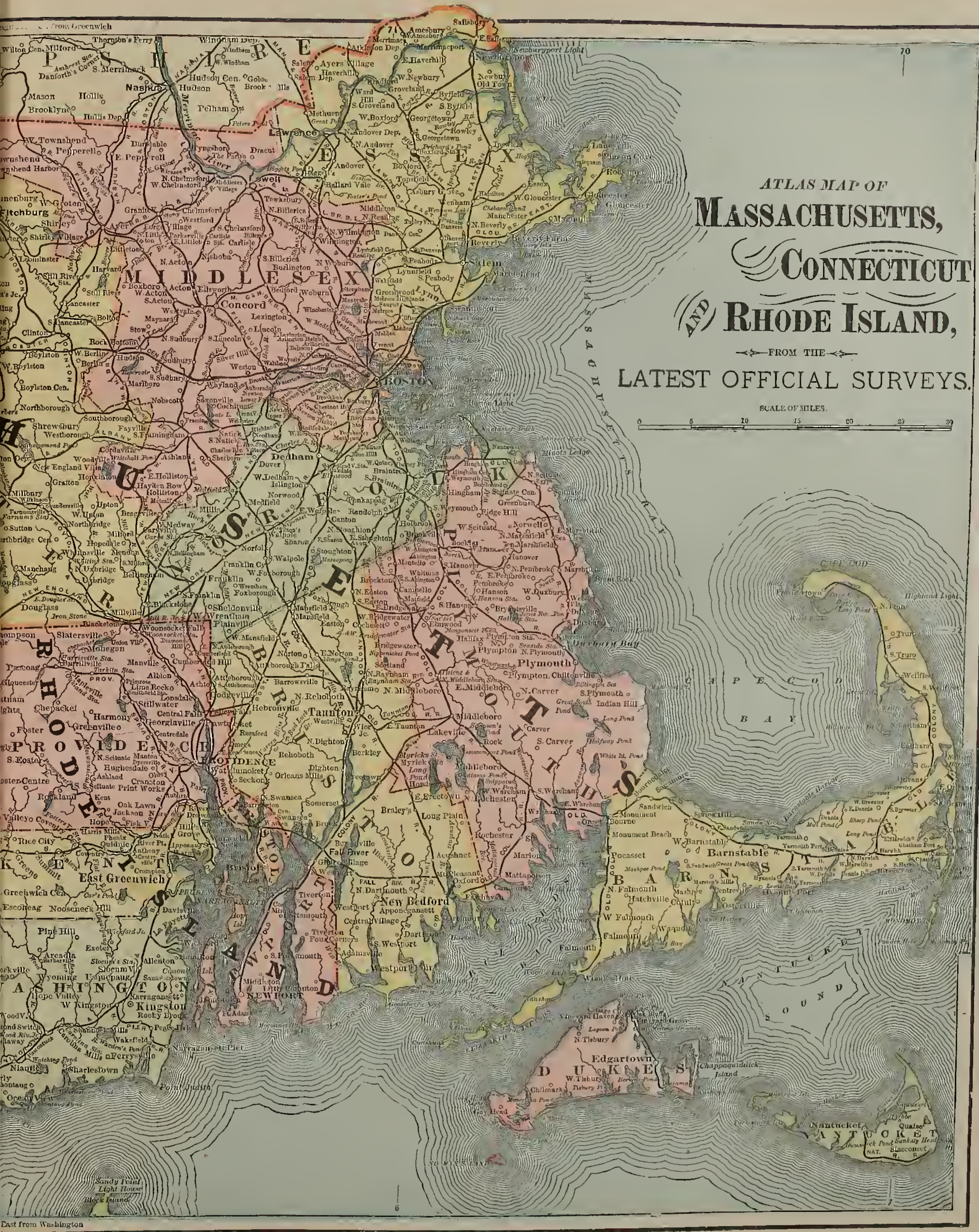
PORTLAND

MAINE

SCALE OF FEET
0
500
1,000
1,500
2,000
BACK COVE
PORTLAND HARBOR
FORE RIVER
STROUDWATER RIVER
DEERING
EAST DEERING
WOODFORDS
TOWN OF DEERING
LIBBY'S CORNER
CAPE ELIZABETH
TOWN OF CAPE ELIZABETH
FERRY VILLAGE
KNIGHTVILLE
DEERING'S OAKS PARK
BRAMHALL HILL
EASTERN CEM.
WESTERN CEMETERY
FOREST CITY CEMETERY
ROMAN CATHOLIC CEMETERY
ICE POND
Long Creek
Canal Basin
Canal
Light House
Breakwater
Portland Dry Docks
Portland Bridge
Vaughans Bridge
Tukey's Bridge
Grand Trunk R.R.
Portland & Rochester R.R.
Boston & Maine R.R.
Eastern R.R.
Maine Central R.R.
Portland & Ogdensburg R.R.
Cape Elizabeth Station
Ferry
Knights Wharf
Almshouse
Maine General Hospital
Base Ball Grounds
Fort Allen
Grand Trunk Wharf
Portland Co.'s Wharf
Coal Wharf
English S.S. Wharves
Atlantic Wharf
Galt Wharf
New York Steamers
Union S.S. Co.
Custom Ho. Wharf
Forest City S.B. Co.
Portland Pier
Commercial Wharf
Long Wharf
Central Wharf
Widgery's Wharf
Union Wharf
Merchants Wharf
Brown's Wharf
Hobson's Wharf
Hughes Wharf
Dyer's Wharf
Dollars Wharf
International S.S. Co.
Dam Gate
Draw
Wharf
Marine Railway
Cape Elizabeth Ferry
N

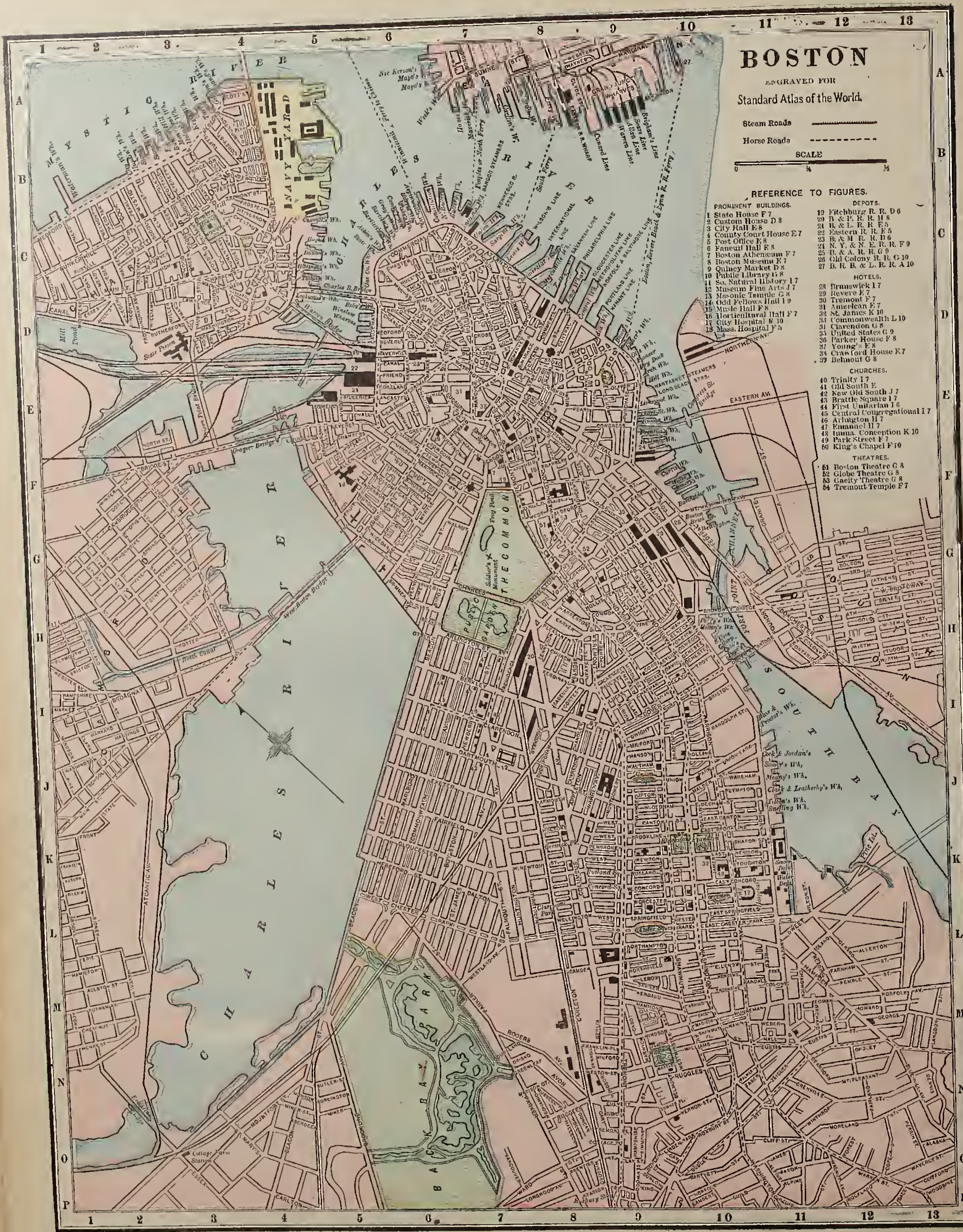

NEW HAMPSHIRE
AND
VERMONT
SCALE OF MILES
0 2 5 10 15 20
Longitude West from Greenwich 72
45
44
43
FRANKLIN
ORLEANS
ESSEX
LAMOILLE
CALEDONIA
CHITTENDEN
WASHINGTON
ADDISON
ORANGE
RUTLAND
WINDSOR
WINDHAM
BENNINGTON
VERMONT
NEW YORK
LAKE CHAMPLAIN
COOS
GRAFTON
CARROLL
BELKNAP
STRAFFORD
SULLIVAN
MERRIMACK
CHESHIRE
HILLSBOROUGH
ROCKINGHAM
NEW HAMPSHIRE
MAINE
MASSACHUSETTS
QUEBEC
Montpelier
Concord
Burlington
Manchester
Portsmouth
Nashua
Rutland
St. Albans
St. Johnsbury
Bennington
Brattleboro
Keene
Dover
Exeter
Plymouth
Lake Memphremagog
Lake Winnipiseogee
Mt. Washington


VERMONT
NEW HAMPSHIRE
MASSACHUSETTS
CONNECTICUT
NEW YORK
BERKSHIRE
FRANKLIN
HAMPSHIRE
HAMPDEN
LITCHFIELD
HARTFORD
TOLLAND
WINDHAM
NEW HAVEN
MIDDLESEX
NEW LONDON
FAIRFIELD
LONG ISLAND SOUND
Pittsfield
Greenfield
Northampton
Springfield
Worcester
Litchfield
Hartford
Waterbury
Middletown
Norwich
New London
New Haven
Danbury
Bridgeport
Longitude East



ATLAS MAP OF MASSACHUSETTS, CONNECTICUT AND RHODE ISLAND, FROM THE LATEST OFFICIAL SURVEYS.

SCALE OF MILES.
0
5
10
15
20
25
30
MIDDLESEX
ESSEX
NORFOLK
PLYMOUTH
BRISTOL
BARNSTABLE
DUKES
NANTUCKET
PROVIDENCE
KENT
WASHINGTON
NEWPORT
RHODE ISLAND
MASSACHUSETTS BAY
CAPE COD BAY
NANTUCKET SOUND
Boston
Lowell
Lawrence
Salem
Gloucester
Newburyport
Plymouth
Taunton
New Bedford
Fall River
Providence
Woonsocket Falls
Fitchburg
Barnstable
Provincetown
Edgartown
Nantucket
Block Island
Sandy Point Light House
East from Greenwich
East from Washington
70


1
2
3
4
5
6
7
8
9
10
11
12
13
A
B
C
D
E
F
G
H
I
J
K
L
M
N
O
P
MYSTIC RIVER
NAVY YARD
CHARLES RIVER
THE COMMON
PUBLIC GARDEN
Frog Pond
Soldier's Monument
BACK BAY PARK
SOUTH BAY
FORT POINT CHANNEL
SOUTH BOSTON
Mill Pond
Canal
Craigie's Bridge
West Boston Bridge
Warren Bridge
Charles R. Bridge
Cunard Line
Grand Junction Wharves
Northern Av.
Eastern Av.
Broadway
Washington St.
Tremont St.
Beacon St.
Commonwealth Av.
Columbus Av.
Dorchester Av.
Cottage Farm Station
Roxbury St.

BOSTON

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Steam Roads ┼┼┼┼┼┼┼┼

Horse Roads - - - - - - - -

SCALE

0 ¼ ½

REFERENCE TO FIGURES.

PROMINENT BUILDINGS.

1 State House F 7
2 Custom House D 8
3 City Hall E 8
4 County Court House E 7
5 Post Office E 8
6 Faneuil Hall E 8
7 Boston Athenæum F 7
8 Boston Museum E 7
9 Quincy Market D 8
10 Public Library G 8
11 So. Natural History I 7
12 Museum Fine Arts J 7
13 Masonic Temple G 8
14 Odd Fellows Hall I 9
15 Music Hall F 8
16 Horticultural Hall F 7
17 City Hospital K 10
18 Mass. Hospital F 5

DEPOTS.

19 Fitchburg R. R. D 6
20 B & P. R. R. H 8
21 B. & L. R. R. E 5
22 Eastern R. R. E 5
23 B. & M. R. R. D 6
24 N. Y. & N. E. R. R. F 9
25 B. & A. R. R. G 9
26 Old Colony R. R. G 10
27 B. R. B. & L. R. R. A 10

HOTELS.

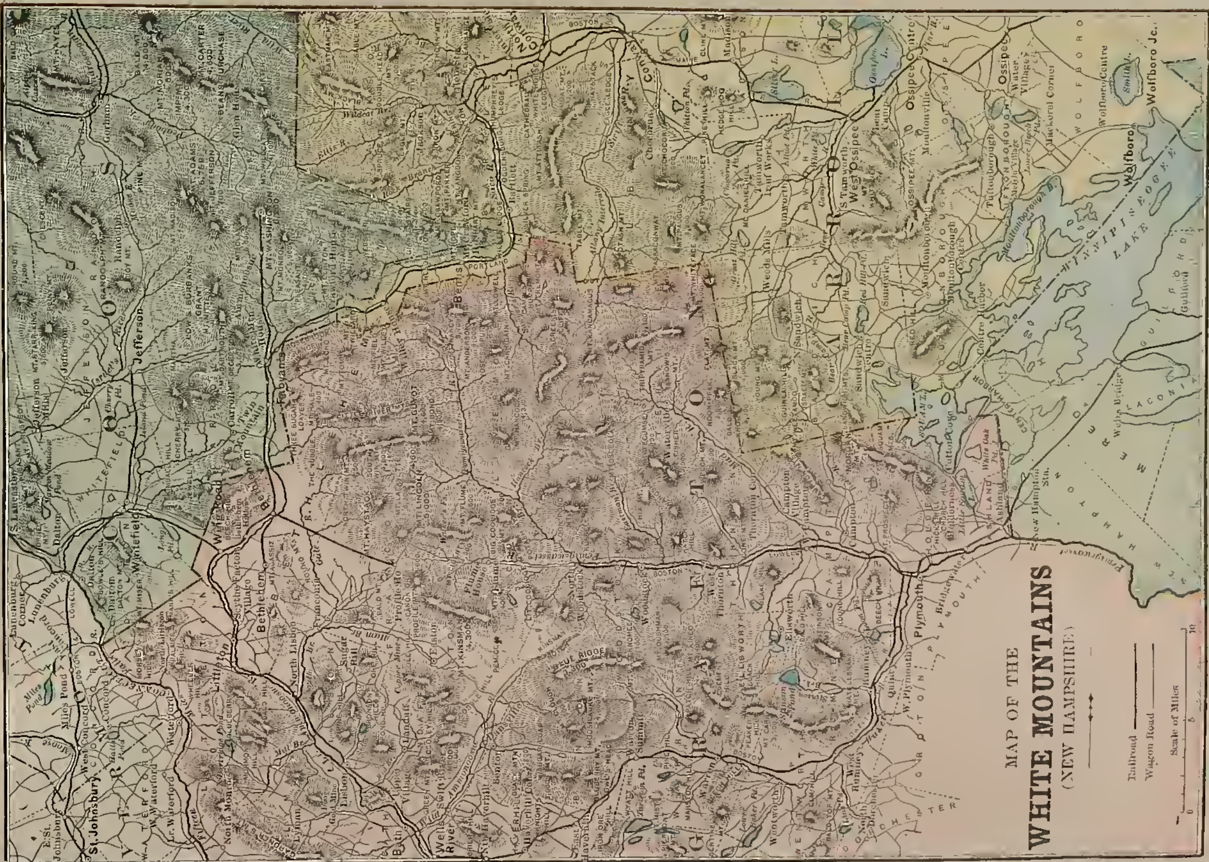
28 Brunswick I 7
29 Revere E 7
30 Tremont F 7
31 American E 7
32 St. James K 10
33 Commonwealth L 10
34 Clarendon G 8
35 United States G 9
36 Parker House F 8
37 Young's E 8
38 Crawford House E 7
39 Belmont G 8

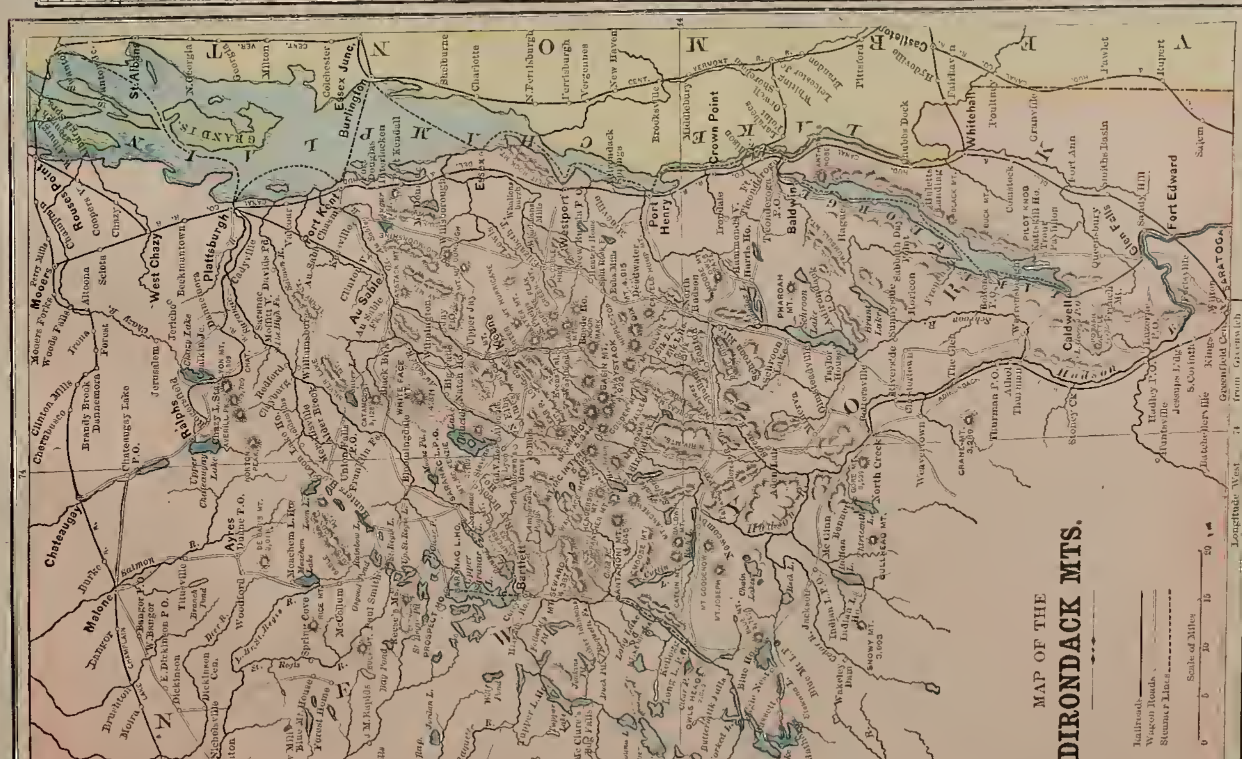
CHURCHES.

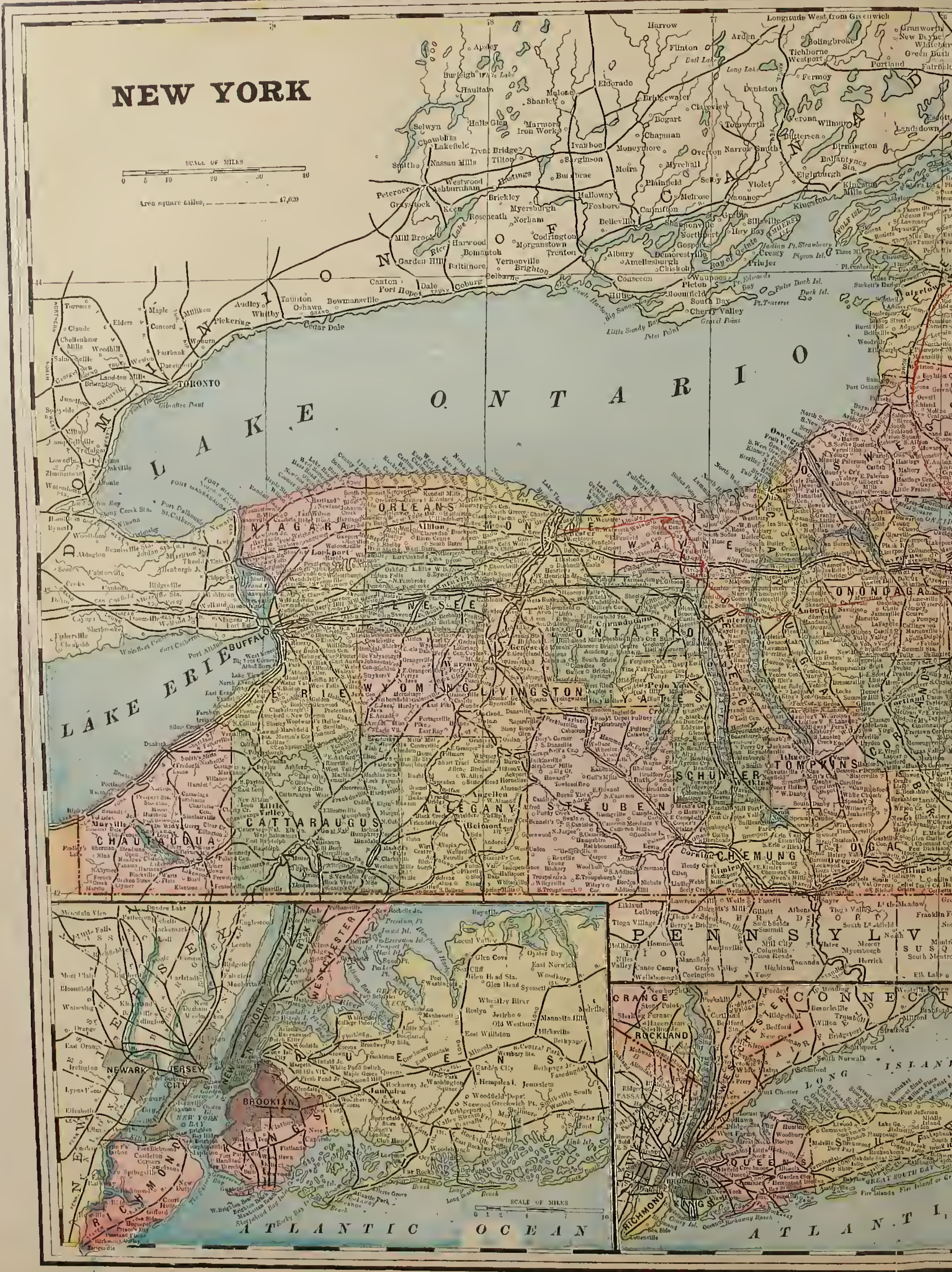
40 Trinity I 7
41 Old South E
42 New Old South J 7
43 Brattle Square I 7
44 First Unitarian I 6
45 Central Congregational I 7
46 Arlington H 7
47 Emanuel H 7
48 Imma. Conception K 10
49 Park Street F 7
50 King's Chapel F 10

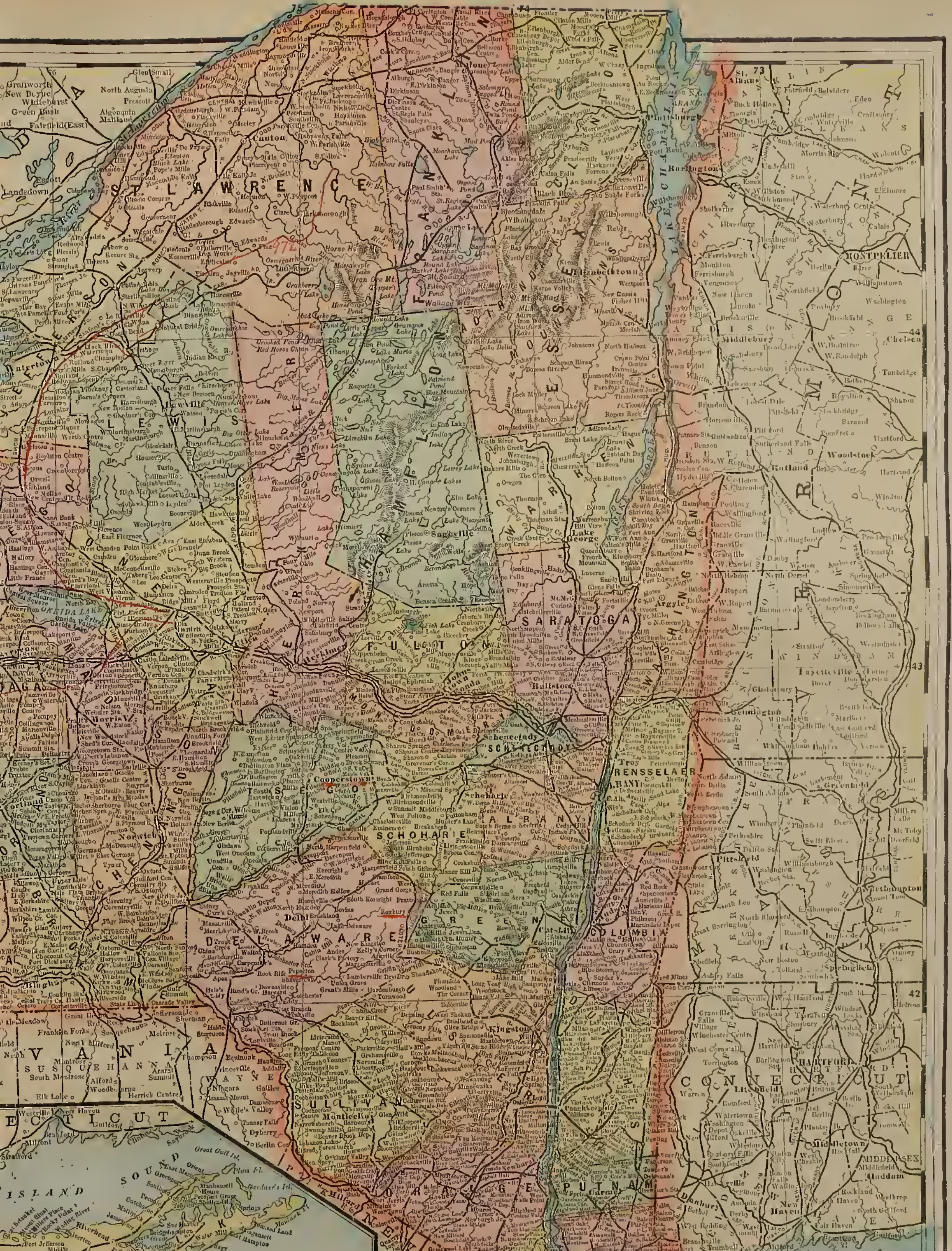
THEATRES.

51 Boston Theatre G 8
52 Globe Theatre G 8
53 Gaeity Theatre G 8
54 Tremont Temple F 7

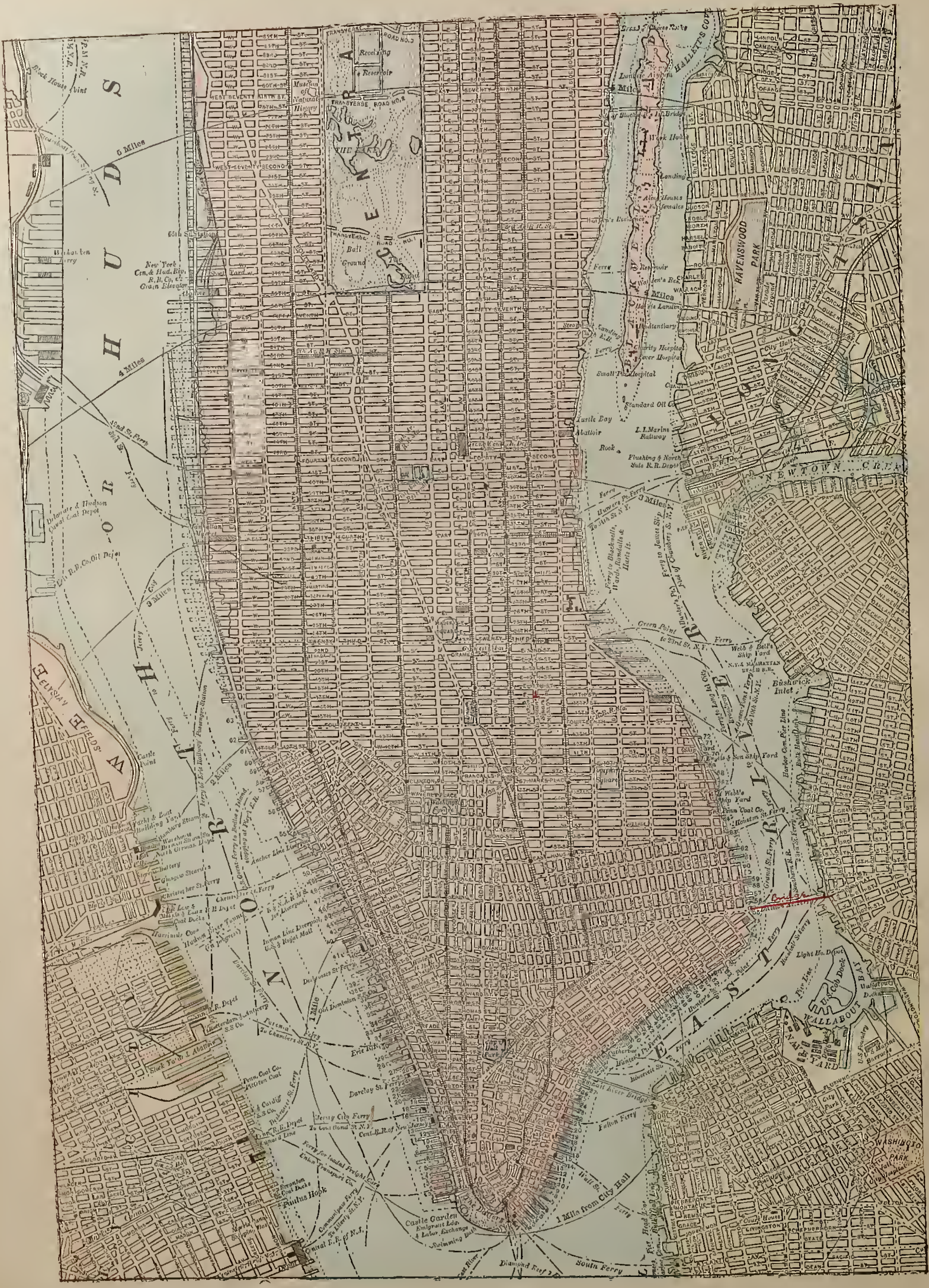

MAP OF THE
WHITE MOUNTAINS
(NEW HAMPSHIRE)
Railroad
Wagon Road
Scale of Miles
0
5
10


MAP OF THE
ADIRONDACK MTS.
Railroads
Wagon Roads
Steamer Lines
Scale of Miles
0
5
10
20


NEW YORK
SCALE OF MILES
0 5 10 20 30 40
Area square miles, 47,620
Longitude West from Greenwich
LAKE ONTARIO
LAKE ERIE
DOMINION OF CANADA
TORONTO
BUFFALO
NIAGARA
ORLEANS
GENESEE
WAYNE
ONONDAGA
ERIE
WYOMING
LIVINGSTON
ONTARIO
YATES
SCHUYLER
TOMPKINS
CORTLAND
CHAUTAUQUA
CATTARAUGUS
ALLEGANY
STEUBEN
CHEMUNG
TIOGA
PENNSYLVANIA
NEW JERSEY
NEWARK
JERSEY CITY
NEW YORK
BROOKLYN
RICHMOND
QUEENS
KINGS
WESTCHESTER
ORANGE
ROCKLAND
CONNECTICUT
LONG ISLAND
ATLANTIC OCEAN

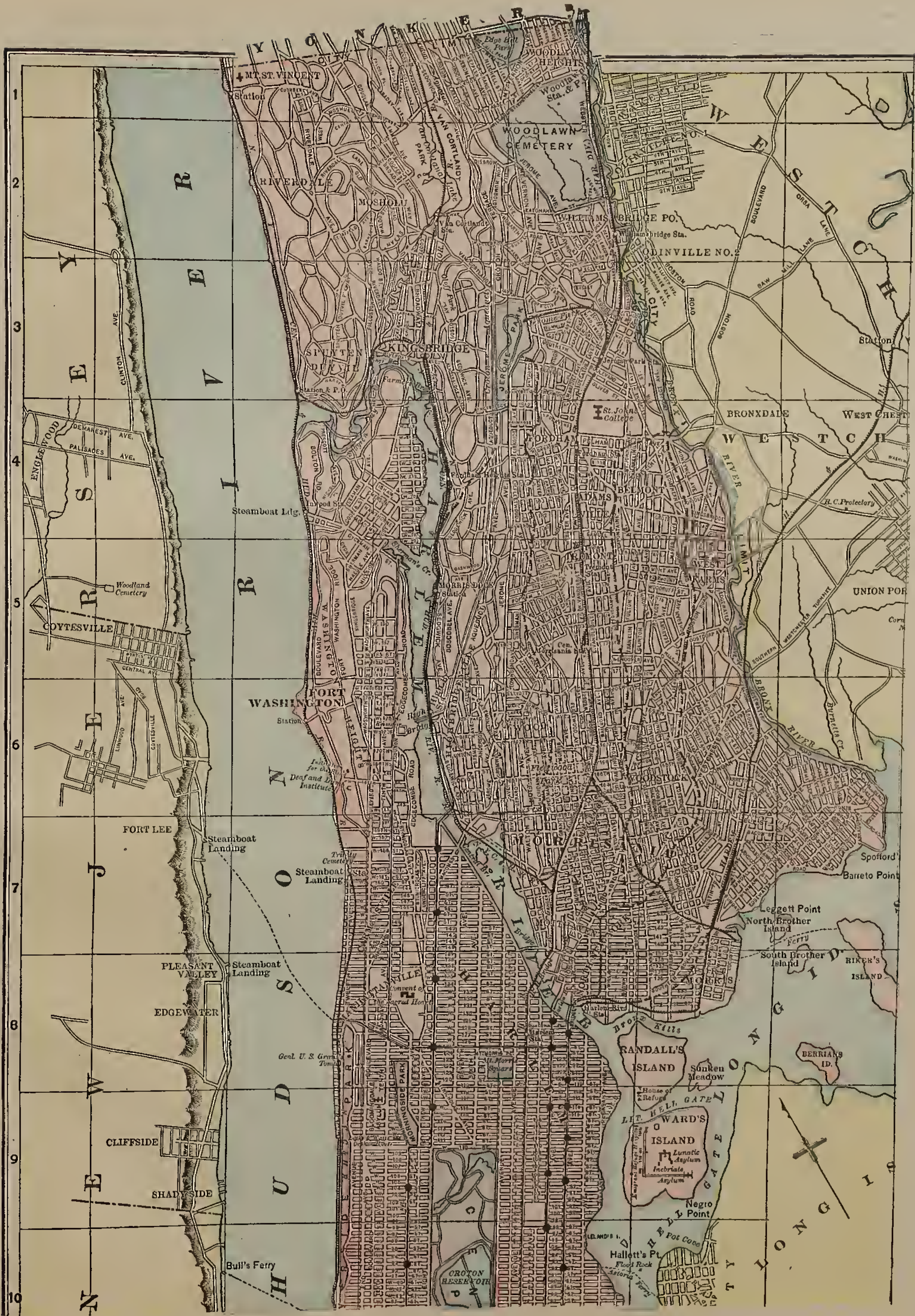

ST. LAWRENCE
FRANKLIN
CLINTON
ESSEX
HAMILTON
LEWIS
HERKIMER
FULTON
SARATOGA
WARREN
WASHINGTON
MONTGOMERY
SCHENECTADY
RENSSELAER
ALBANY
SCHOHARIE
OTSEGO
CHENANGO
DELAWARE
GREENE
COLUMBIA
ULSTER
SULLIVAN
ORANGE
DUTCHESS
PUTNAM
WESTCHESTER
ROCKLAND
SUFFOLK
CHITTENDEN
ADDISON
RUTLAND
WINDHAM
ORANGE
BERKSHIRE
HAMPSHIRE
FRANKLIN
LITCHFIELD
HARTFORD
MIDDLESEX
NEW HAVEN
CONNECTICUT
VERMONT
MONTPELIER
Burlington
Plattsburgh
Rutland
Bennington
Saratoga
Schenectady
Troy
Albany
Cooperstown
Kingston
Poughkeepsie
Hartford
New Haven
Bridgeport
Middletown
Pittsfield
Springfield
Northampton
LONG ISLAND SOUND
ATLANTIC OCEAN
LONG ISLAND
SOUND
Great Gull Isl.
Plum Isl.
Gardiner's Isl.
Fire Island or Great South Beach
GREAT SOUTH BAY
Fishers Isl.
Great Peconic Bay
LAKE CHAMPLAIN
LAKE GEORGE
ONEIDA LAKE
SCALE OF MILES
Longitude East from Washington
73
74
44
43
42
41
PENNSYLVANIA
SUSQUEHANNA
WAYNE
PIKE
SUSSEX
PASSAIC
BERGEN
NEW JERSEY
CONNECTICUT

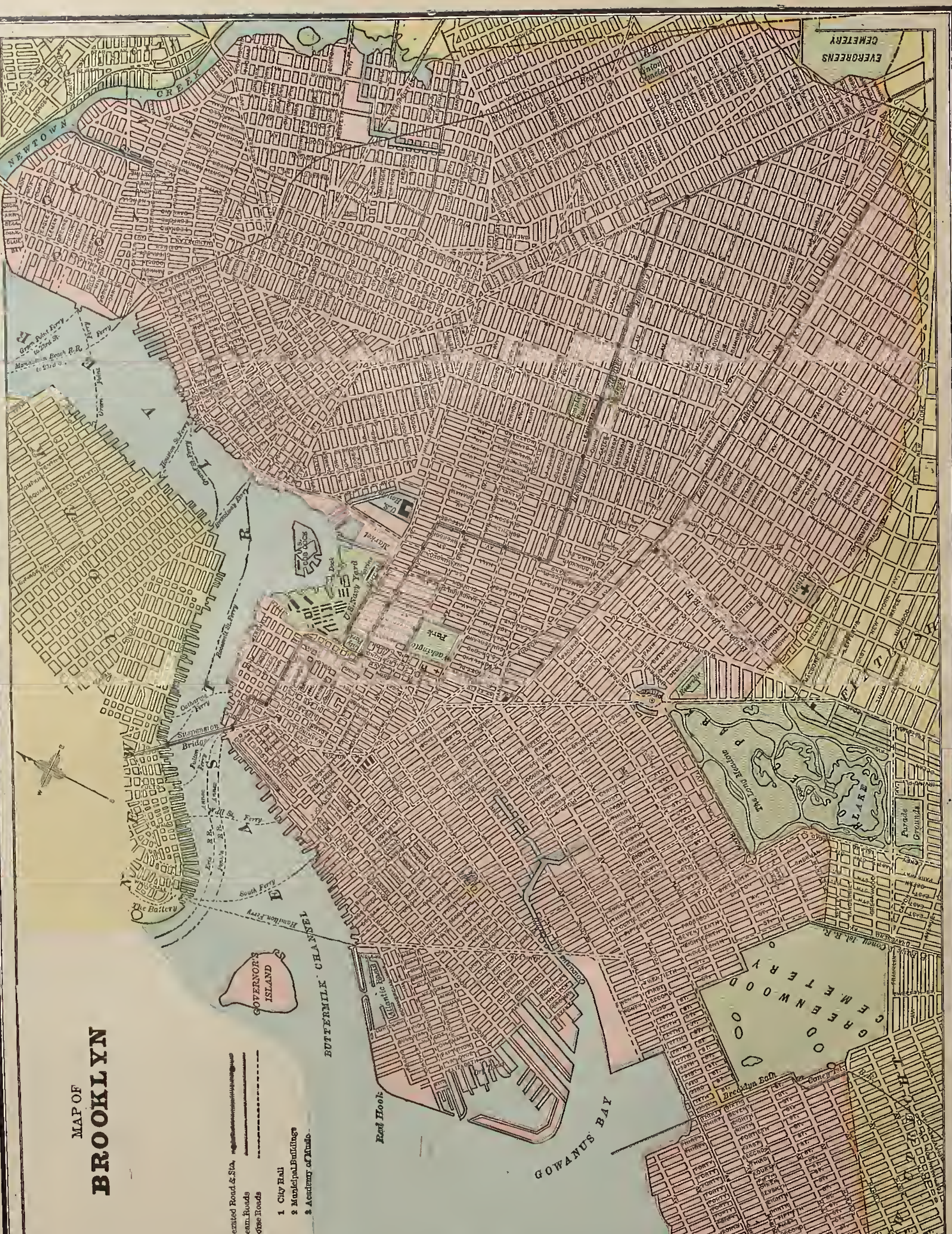
NEW YORK CITY, LOWER HALF.

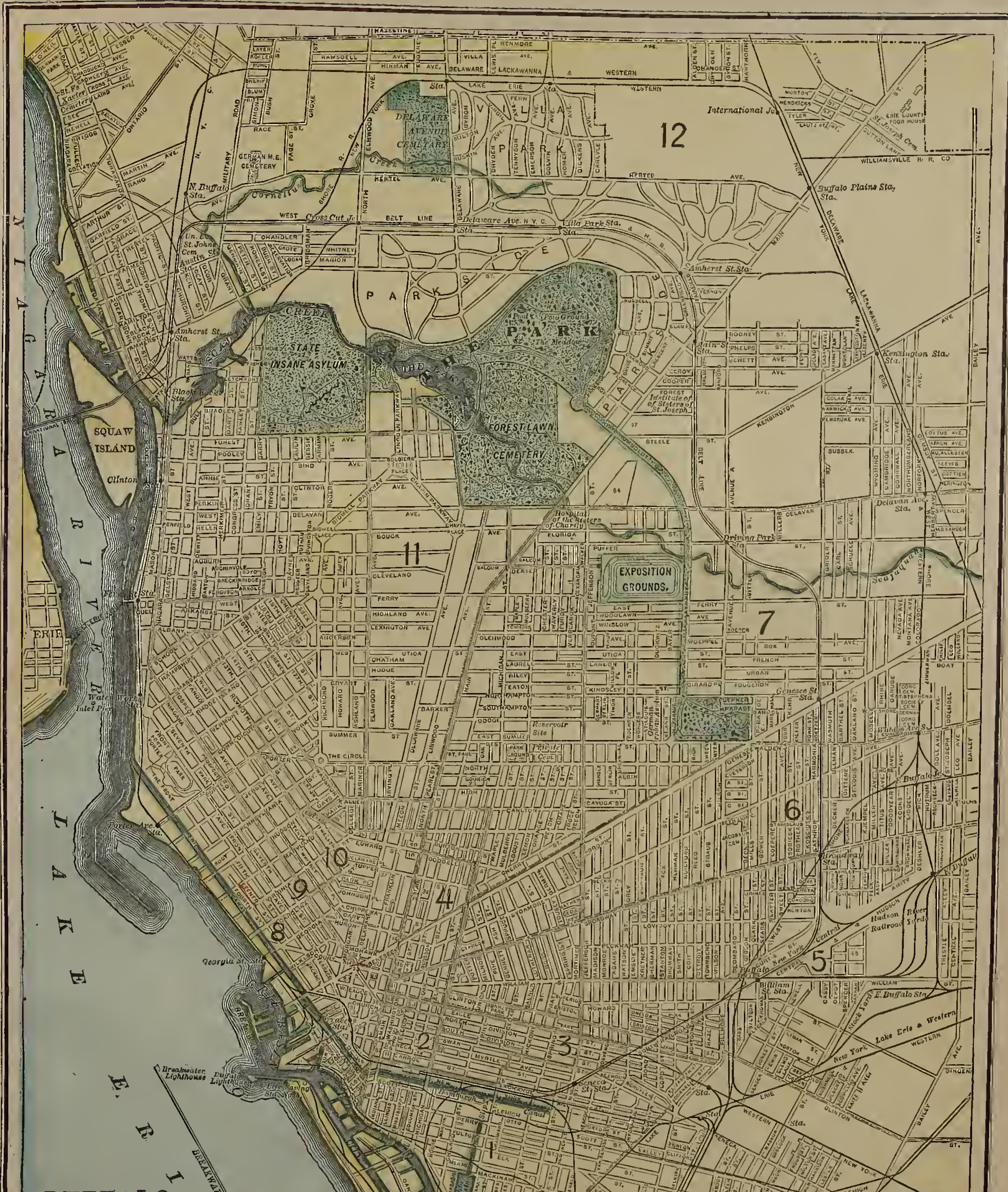


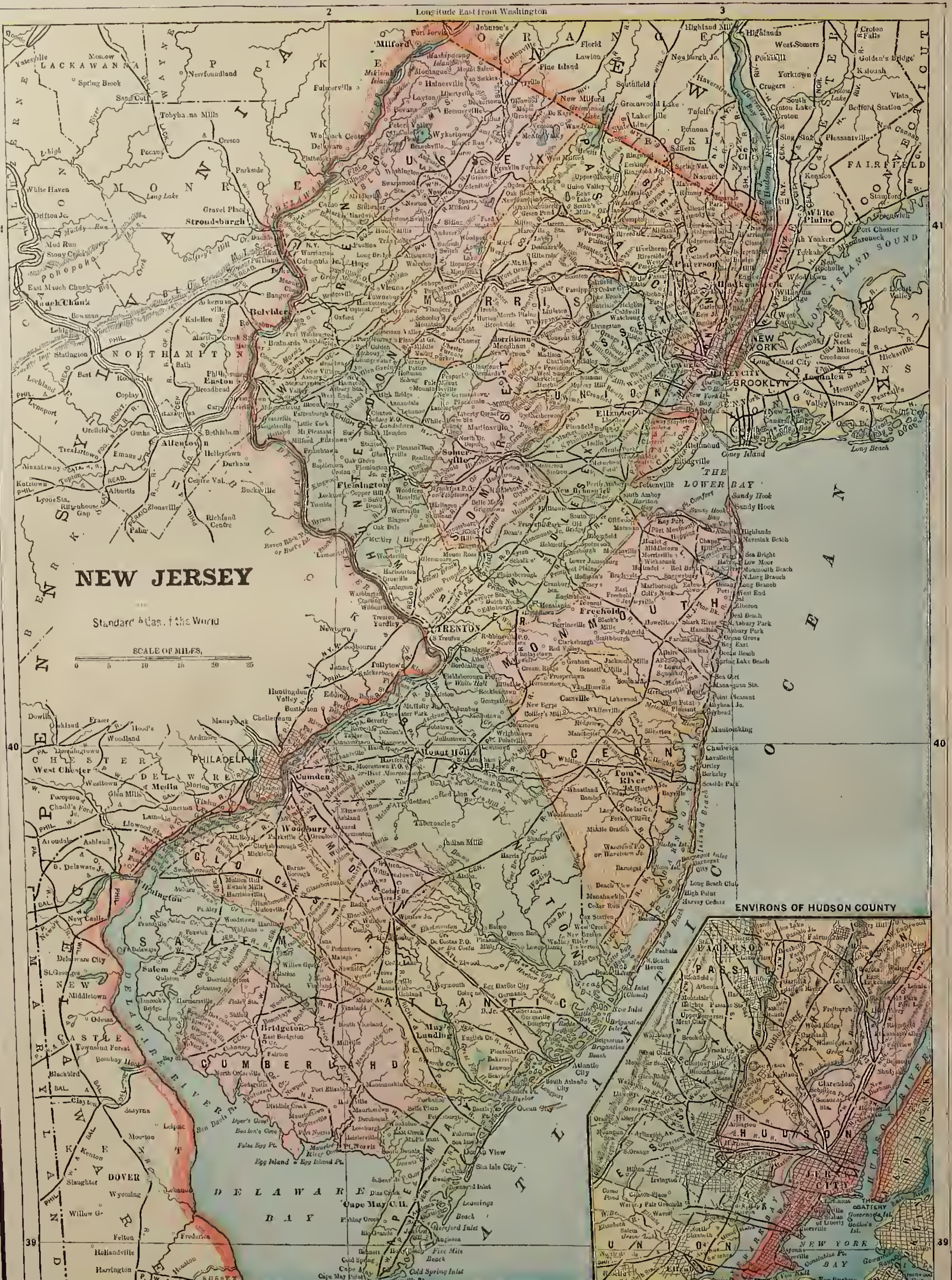
HUDSON RIVER
NORTH RIVER
EAST RIVER
CENTRAL PARK
The Lake
Receiving Reservoir
Museum of Natural History
Ball Ground
The Mall
TRANSVERSE ROAD NO. 3
TRANSVERSE ROAD NO. 2
TRANSVERSE ROAD NO. 1
BLACKWELLS ISLAND
Lunatic Asylum
Work House
Penitentiary
Charity Hospital
Small Pox Hospital
Alms Houses
HALLETTS COVE
RAVENSWOOD PARK
LONG ISLAND CITY
City Hall
Standard Oil Co.
Turtle Bay
Abattoir
L. I. Marine Railway
Flushing & North Side R.R. Depot
NEWTOWN CREEK
Green Point
Bushwick Inlet
Webb & Bell's Ship Yard
WALLABOUT BAY
NAVY YARD
U.S. Marine Barracks
City Park
WASHINGTON PARK
East River Bridge
Fulton Ferry
South Ferry
Diamond Reef
East River
Wall St. Ferry
1 Mile from City Hall
Castle Garden
Emigrant Ldg. & Labor Exchange
Swimming Bath
The Battery
Communipaw Ferry to Liberty St. N.Y.
Central R.R. of N.J.
Paulus Hook
Jersey City Ferry to Courtland St. N.Y.
Cent. R.R. of New Jersey
Desbrosses St. Ferry
Barclay St. Ferry
Erie R.R.
Pavonia Ferry to Chambers St. N.Y.
Hudson River Tunnel (in progress)
Harsimus Cove
Christopher St. Ferry
Hoboken Ferry
Elysian Fields
WEEHAWKEN
Castle Point
Delaware & Hudson Canal Coal Depot
Erie R.R. Co. Oil Depot
Weehawken Ferry
42nd St. Ferry
New York Cen. & Hud. Riv. R.R. Co.'s Grain Elevator
65th St. Station
Block House Point
Tompkins Square
Union Square
Washington Square
Madison Square
Gramercy Park
Stuyvesant Square
6 Miles
5 Miles
4 Miles
3 Miles
2 Miles
1 Mile

NEW YORK CITY, UPPER HALF


YONKERS CITY
MT. ST. VINCENT
Station
WOODLAWN HEIGHTS
Edge Hill Park
Woodlawn Sta. & P.O.
WOODLAWN CEMETERY
VAN CORTLANDT PARK
RIVERDALE
MOSHOLU
Van Cortlandt Sta.
WILLIAMSBRIDGE P.O.
Williamsbridge Sta.
WAKEFIELD
WESTCHESTER
WILLIAMSBRIDGE
OLINVILLE NO. 2
BOSTON ROAD
BOULEVARD
SAW MILL LANE
Station
SPUYTEN DUYVIL
KINGSBRIDGE
Station & P.O.
Jerome Park
St. John's College
FORDHAM
BRONXDALE
WEST CHESTER
WESTCHESTER
BRONX RIVER
BELMONT
R.C. Protectory
ADAMS VILLAGE
Steamboat Ldg.
Inwood Sta.
TREMONT
WEST FARMS
UNION PORT
Woodland Cemetery
MORRIS DOCK Station
COYTESVILLE
FORT WASHINGTON
WASHINGTON Station
High Bridge
Deaf and Dumb Institute
Institute for the Blind
WOODSTOCK
MORRISANIA
FORT LEE
Steamboat Landing
Trinity Cemetery
Steamboat Landing
Spofford's
Barreto Point
Leggett Point
North Brother Island
South Brother Island
RIKER'S ISLAND
MANHATTANVILLE
Convent of Sacred Heart
PLEASANT VALLEY
Steamboat Landing
EDGEWATER
PORT MORRIS
Harlem River Sta.
Bronx Kills
RANDALL'S ISLAND
Sunken Meadow
BERRIAN'S ID.
Genl. U. S. Grant Tomb
Mt. Morris Square
MORNINGSIDE PARK
RIVERSIDE PARK
House of Refuge
LIT. HELL GATE
WARD'S ISLAND
Lunatic Asylum
Inebriate Asylum
Emigrant Refuge & Hospital
CLIFFSIDE
SHADYSIDE
Negro Point
HELL GATE
Pot Cove
Hallett's Pt.
Flood Rock
Astoria
Bull's Ferry
CROTON RESERVOIR
CENTRAL PARK
HUDSON RIVER
HARLEM RIVER
EAST RIVER
LONG ISLAND SOUND
LONG ISLAND CITY
NEW JERSEY
ENGLEWOOD
PALISADES AVE.
DEMAREST AVE.
CLINTON AVE.
1
2
3
4
5
6
7
8
9
10

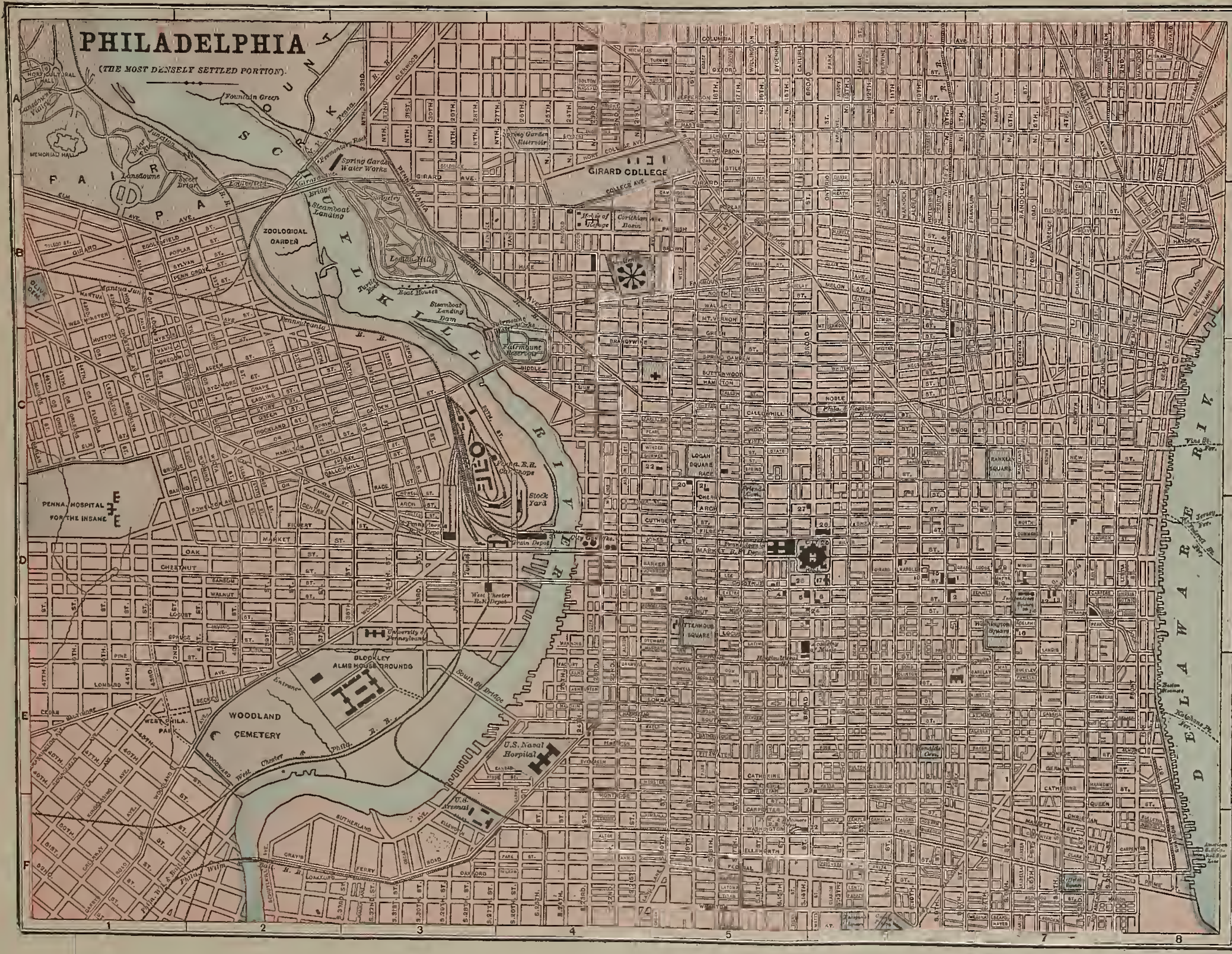

MAP OF
BROOKLYN
Elevated Road & Sta.
Steam Roads
Horse Roads
1 City Hall
2 Municipal Buildings
3 Academy of Music
NEWTOWN CREEK
EVERGREENS CEMETERY
Union Cemetery
U.S. Navy Yard
Cob Dock
Washington Park
Suspension Bridge
Catharine Ferry
Fulton Ferry
Wall St. Ferry
South Ferry
Hamilton Ferry
Roosevelt St. Ferry
Erie R.R. Annex
Penn'a R.R. Annex
The Battery
GOVERNOR'S ISLAND
BUTTERMILK CHANNEL
Atlantic Basin
Red Hook
GOWANUS BAY
PROSPECT PARK
The Long Meadow
LAKE
Parade Grounds
GREENWOOD CEMETERY
Brooklyn Bath & Coney Isl. R.R.
Coney Isl. R.R.
Brooklyn
Fulton
Myrtle
Flushing
Broadway
Atlantic


BUFFALO
NIAGARA RIVER
LAKE ERIE
SQUAW ISLAND
ERIE
BREAKWATER
Breakwater Lighthouse
Buffalo Lighthouse
DELAWARE AVENUE CEMETERY
VILLA PARK
PARK SIDE
THE PARK
The Meadow
THE LAKE
STATE INSANE ASYLUM
FOREST LAWN CEMETERY
EXPOSITION GROUNDS
Hospital of the Sisters of Charity
Forest Institute of Sisters of St. Joseph
Reservoir Site
THE CIRCLE
German M.E. Cemetery
St. Fs. Xavier Cemetery
Erie County Poor House
St. Joseph Cem.
International Jc.
Buffalo Plains Sta.
Amherst St. Sta.
Main St. Sta.
Kensington Sta.
Delavan Ave. Sta.
Driving Park Sta.
Genesee St. Sta.
Walden Ave. Sta.
Broadway Sta.
William Sta.
E. Buffalo Sta.
Seneca Sta.
N. Buffalo Sta.
Black Rock Sta.
Clinton Ave.
Ferry St. Sta.
Water Works Sta.
Porter Ave. Sta.
Georgia St. Sta.
Villa Park Sta.
Delaware Ave. N.Y.C. Sta.
Cross Cut Jc.
BELT LINE
Williamsville R. R. Co.
Lake Erie & Western
New York Central
Hudson River Railroad Yards
Erie Canal
Lehigh Canal
Scajaquada Creek
Cornelius Creek
1
2
3
4
5
6
7
8
9
10
11
12


NEW JERSEY
Standard Atlas of the World
SCALE OF MILES.
0 5 10 15 20 25
Longitude East from Washington
2
3
Longitude West from Greenwich
75
76
41
40
39
ENVIRONS OF HUDSON COUNTY
SUSSEX
MORRIS
PASSAIC
BERGEN
ESSEX
HUDSON
UNION
WARREN
HUNTERDON
SOMERSET
MIDDLESEX
MONMOUTH
MERCER
BURLINGTON
OCEAN
CAMDEN
GLOUCESTER
SALEM
ATLANTIC
CUMBERLAND
CAPE MAY
ATLANTIC OCEAN
DELAWARE BAY
DELAWARE RIVER
THE LOWER BAY
LONG ISLAND SOUND
NEW YORK BAY
PENNSYLVANIA
NEW YORK
DELAWARE
ORANGE
ROCKLAND
WESTCHESTER
FAIRFIELD
CONNECTICUT
QUEENS
KINGS
RICHMOND
MONROE
NORTHAMPTON
LACKAWANNA
PIKE
BUCKS
CHESTER
DELAWARE
NEW CASTLE
KENT
SUSSEX
MARYLAND
TRENTON
PHILADELPHIA
Camden
NEW YORK
BROOKLYN
JERSEY CITY
Newark
Paterson
Elizabeth
Morristown
Somerville
Flemington
Belvidere
Milford
Freehold
Tom's River
Mount Holly
Woodbury
Salem
Bridgeton
May Landing
Cape May C.H.
Cape May
Atlantic City
Long Branch
Asbury Park
Sandy Hook
Coney Island
Easton
Allentown
Stroudsburgh
Wilmington
Dover
White Plains
Stamford

PHILADELPHIA

(THE MOST DENSELY SETTLED PORTION)


SCHUYLKILL RIVER
DELAWARE RIV.
FAIRMOUNT PARK
GIRARD COLLEGE
ZOOLOGICAL GARDEN
WOODLAND CEMETERY
BLOCKLEY ALMS HOUSE GROUNDS
PENNA. HOSPITAL FOR THE INSANE
U.S. Naval Hospital
LOGAN SQUARE
RITTENHOUSE SQUARE
FRANKLIN SQUARE
Washington Square
Stock Yard
Spring Garden Water Works
Fairmount Reservoir
Spring Garden Reservoir
MEMORIAL HALL
HORTICULTURAL HALL
Lansdowne
Steamboat Landing
University of Pennsylvania
West Chester R.R. Depot
South St. Bridge
Penna. R.R. Car Shops
A
B
C
D
E
F
1
2
3
4
5
6
7
8

REFERENCES.

HOTELS.

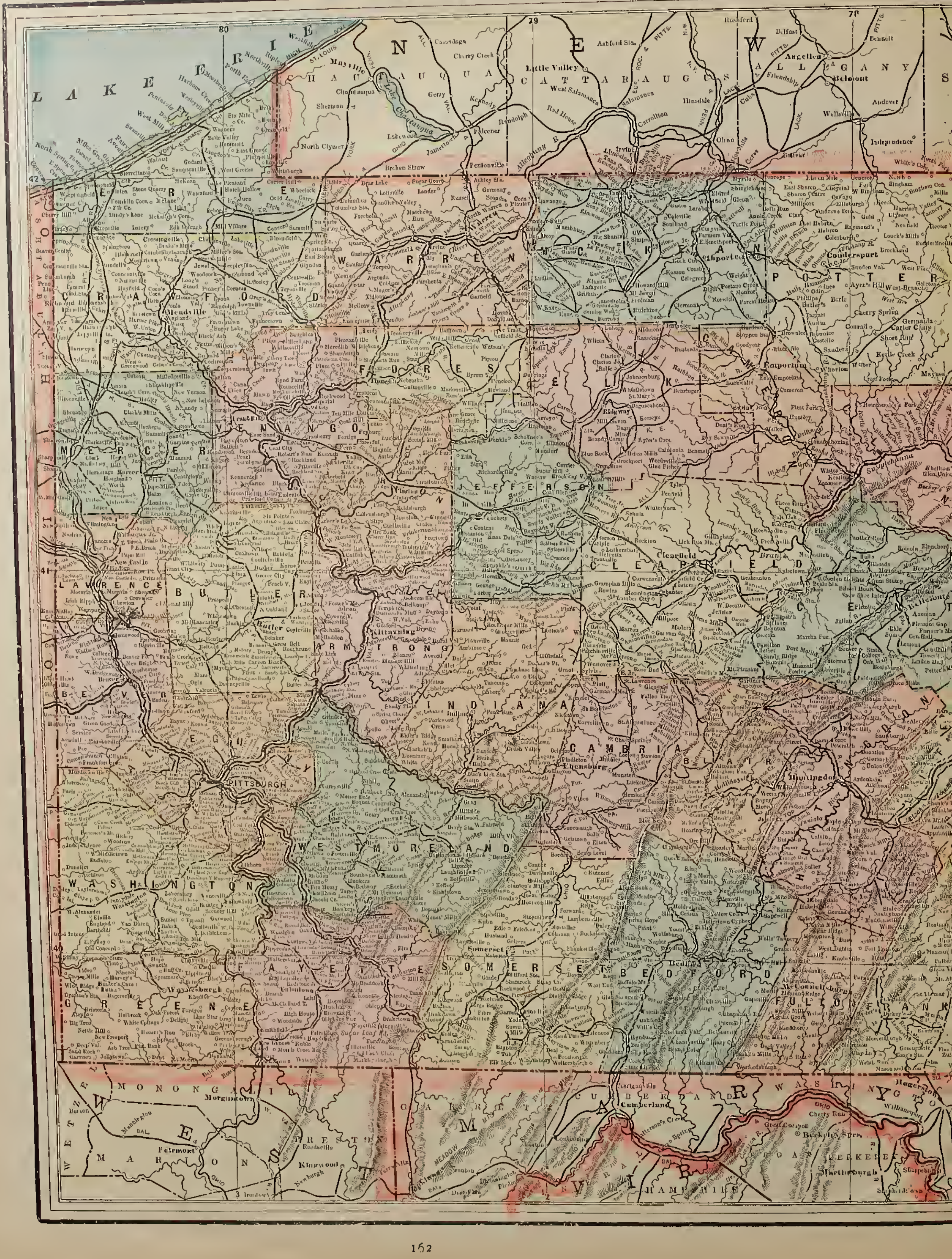
1 Girard House, D 6.
2 Continental, D 6.
3 St. George's, D 6.
4 Colonnade, D 5.
5 La Pierre, D 5.
6 Aldine, D 4.
7 Bingham, D 6.
8 St. Cloud, D. 6.
9 Lafayette, D 7.
10 Guy's, D 7.
11 West End, D 5.

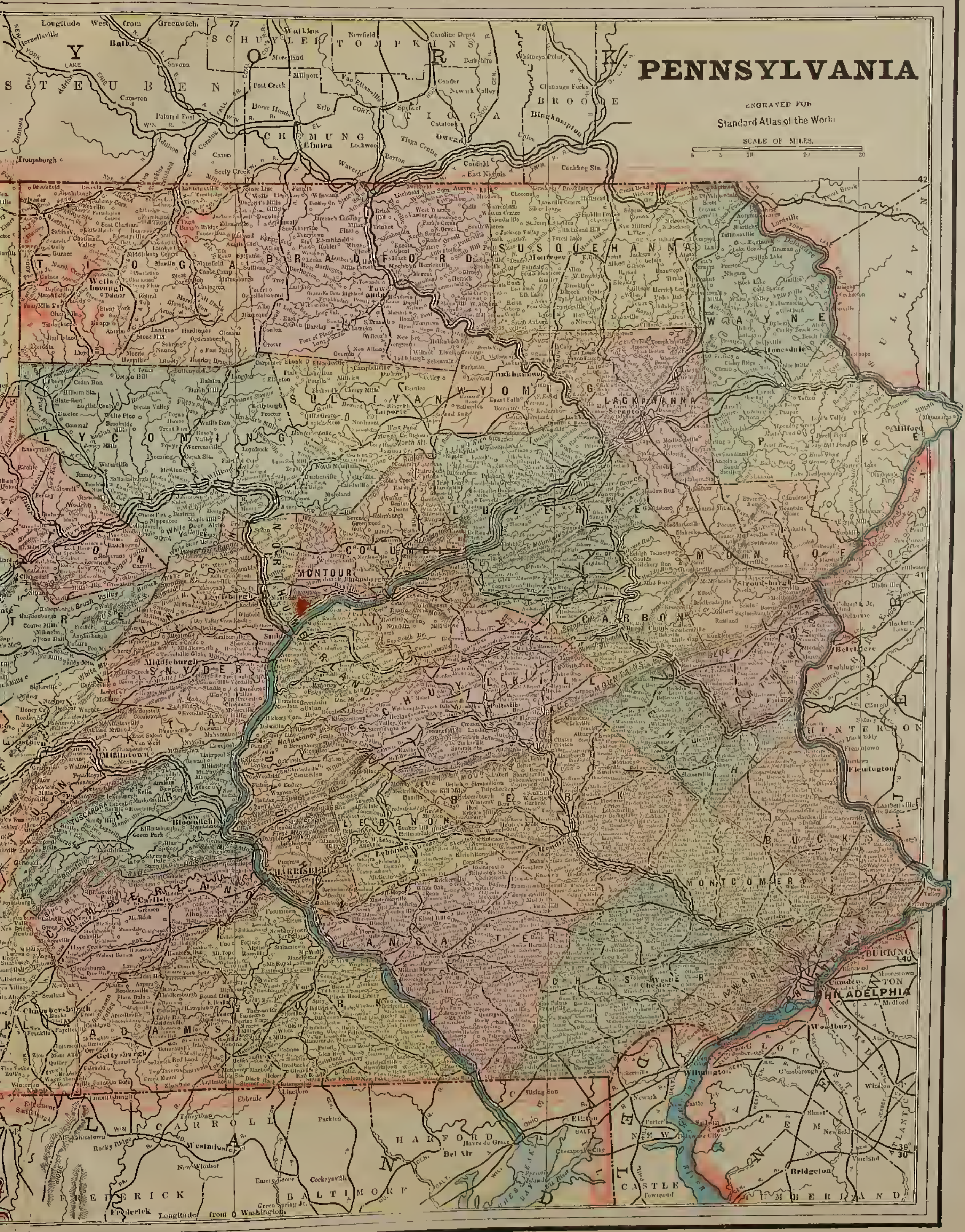
PROMINENT BUILDINGS.

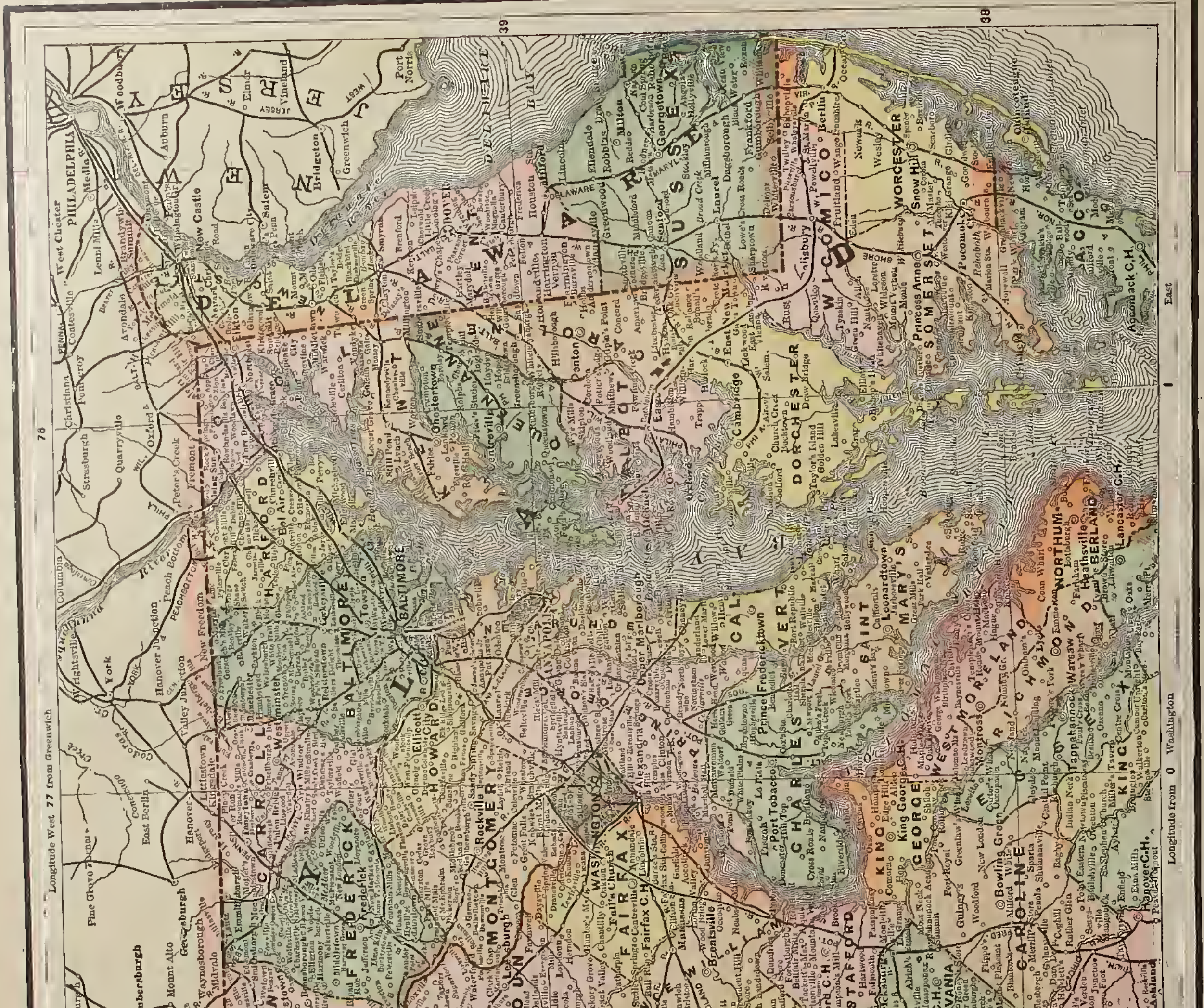
12 Post-Office, D 7.
13 Custom House. D 7.
14 Independence Hall, D 7.
15 Post-Office, D 6.
16 Athenæum, D 7.
17 U. S. Mint, D 6.
18 Merchants' Exch., D 7.
19 Mercantile Library, D 6.
20 Academy of Natural Sciences, C 5.
21 Wills's Hospital, C 5.
22 Institution for the Blind, C 4.
23 Ridgway Library, E 6.
24 Union League Club, D 5.
25 Public Buildings, D 5.
26 Masonic Temple, D 6.
27 Academy of Fine Arts, D 5.
28 Young Men's Christian Association, D 5.
29 Franklin Institute, D 7.

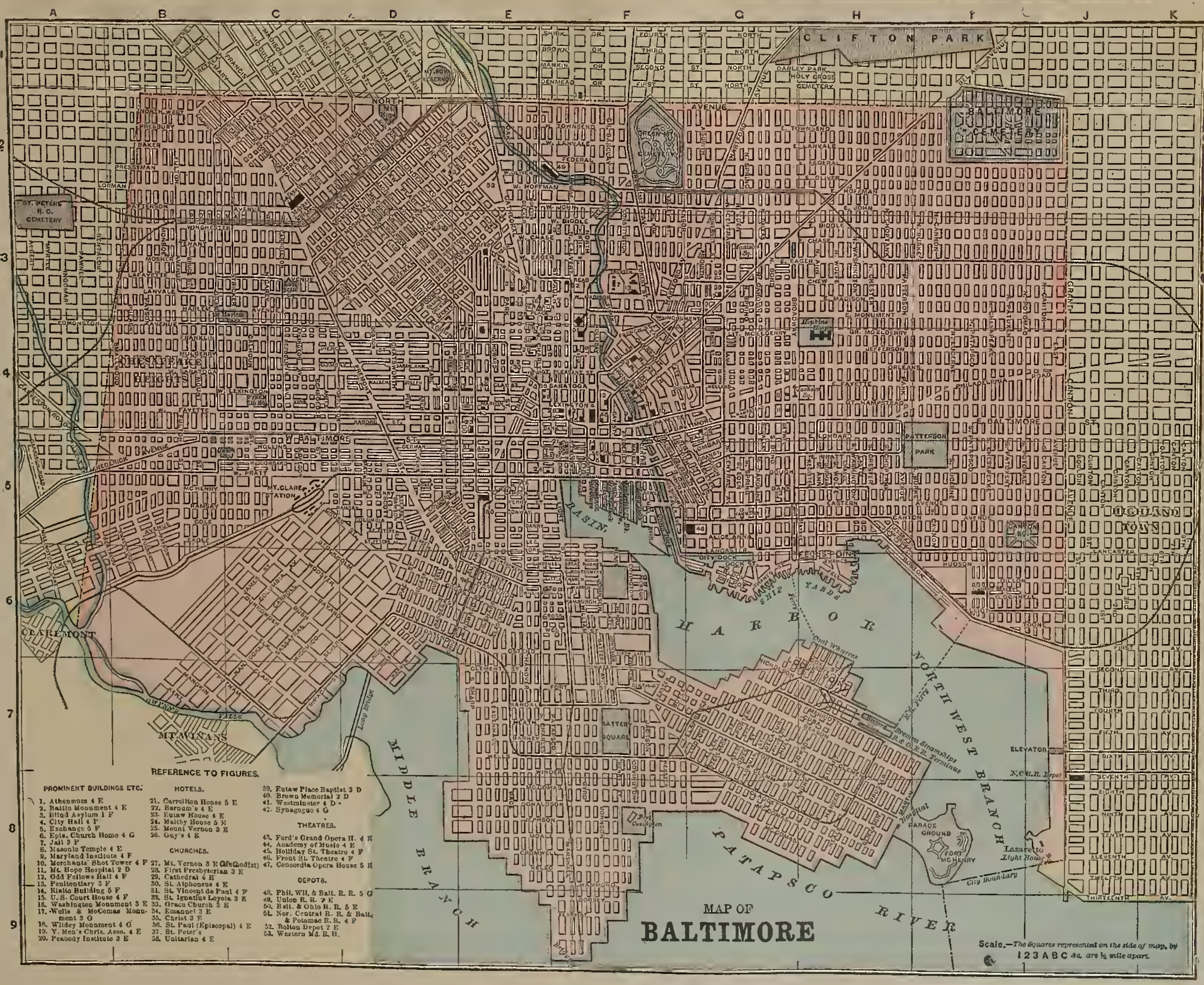
DEPOTS.

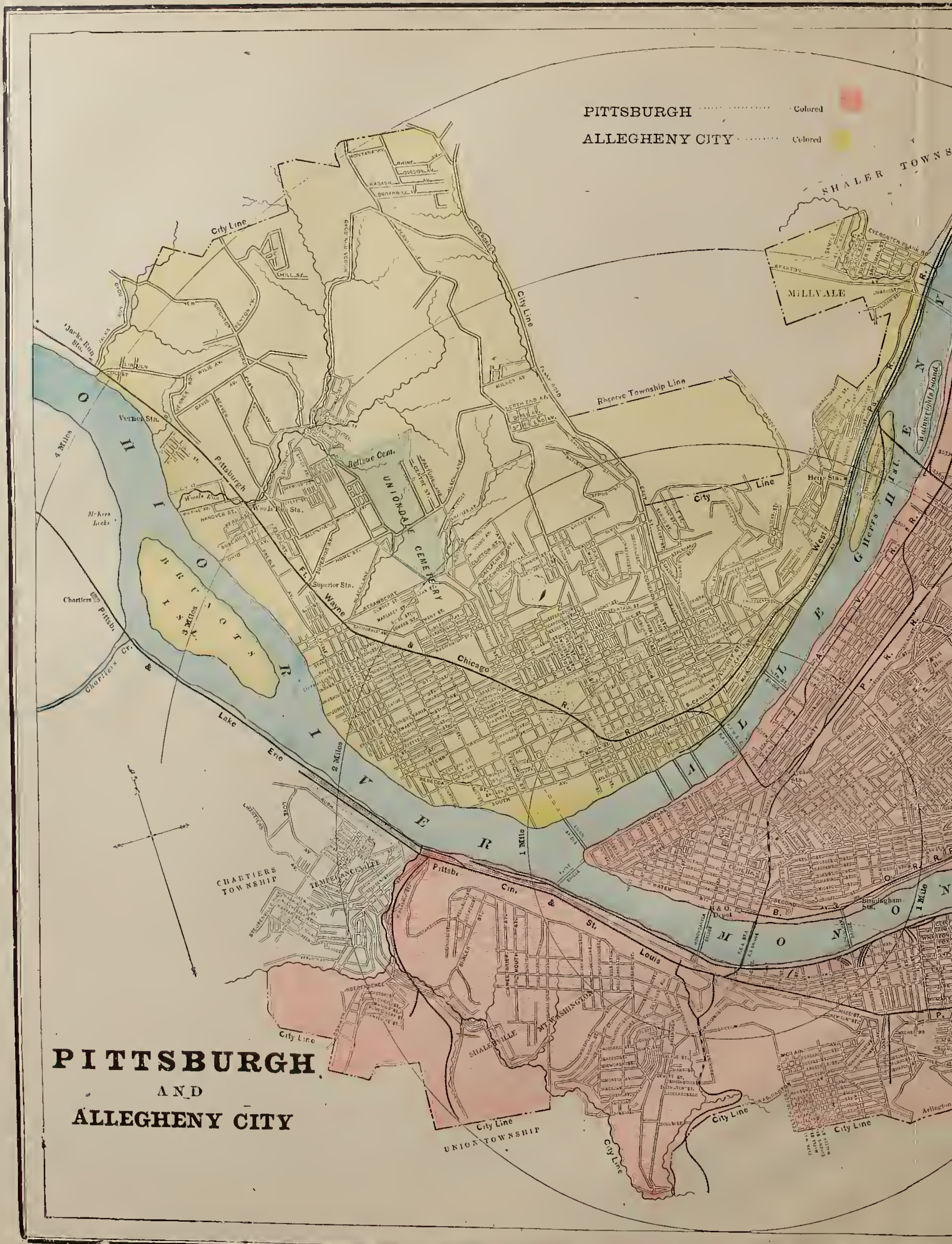
30 Germantown and Norristown R.R., B 7.
31 Pennsylvania R.R., D 4.
32 Philadelphia, Wilmington and Baltimore R.R., E 5.
33 Philadelphia and Reading R.R., C 6.


LAKE ERIE
NEW YORK
CHAUTAUQUA
CATTARAUGUS
ALLEGANY
ERIE
WARREN
McKEAN
POTTER
CRAWFORD
VENANGO
FOREST
ELK
CAMERON
MERCER
CLARION
JEFFERSON
CLEARFIELD
CENTRE
LAWRENCE
BUTLER
ARMSTRONG
INDIANA
CAMBRIA
BLAIR
HUNTINGDON
BEAVER
ALLEGHENY
PITTSBURGH
WESTMORELAND
WASHINGTON
FAYETTE
SOMERSET
BEDFORD
FULTON
GREENE
OHIO
MONONGALIA
MARION
PRESTON
Morgantown
Fairmont
Cumberland
Hagerstown
Erie
Meadville
Franklin
Clarion
Butler
Kittanning
Ebensburg
Somerset
Bedford
Huntingdon
Coudersport
Emporium
Ridgway
Clearfield
80
79
78
42
41
40

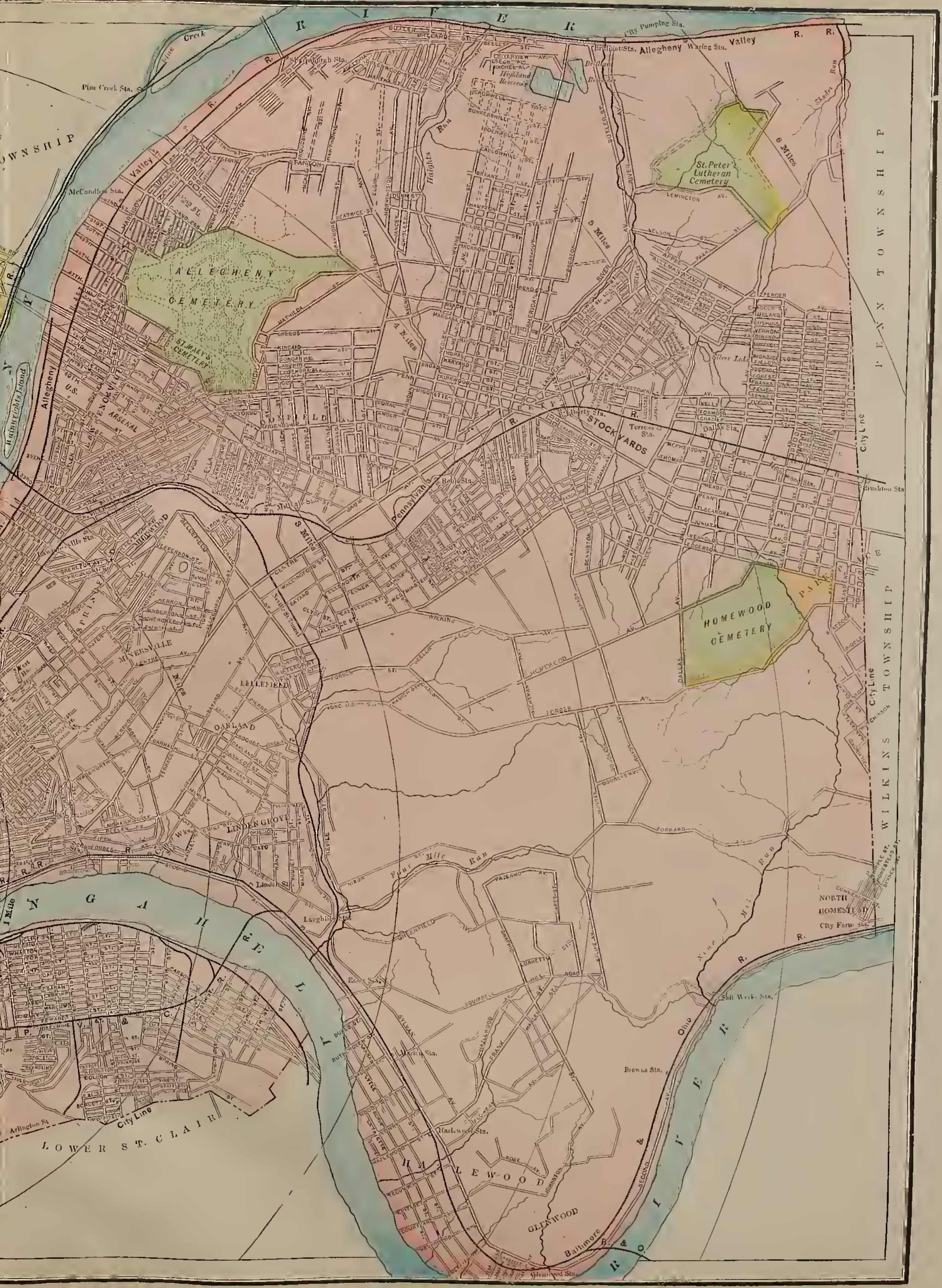

PENNSYLVANIA
ENGRAVED FOR
Standard Atlas of the World
SCALE OF MILES.
0 5 10 20 30
Longitude West from Greenwich
Longitude from Washington
77
76
42
41
40
39° 30
STEUBEN
SCHUYLER
TOMPKINS
CHEMUNG
TIOGA
BROOME
SULLIVAN
BRADFORD
SUSQUEHANNA
WAYNE
PIKE
WYOMING
LACKAWANNA
LYCOMING
COLUMBIA
MONTOUR
LUZERNE
MONROE
CARBON
UNION
SNYDER
NORTHUMBERLAND
SCHUYLKILL
NORTHAMPTON
LEHIGH
BERKS
BUCKS
MONTGOMERY
LEBANON
DAUPHIN
PERRY
JUNIATA
CUMBERLAND
LANCASTER
CHESTER
DELAWARE
YORK
ADAMS
FRANKLIN
CECIL
HARFORD
CARROLL
BALTIMORE
FREDERICK
NEW CASTLE
HUNTERDON
BURLINGTON
GLOUCESTER
SALEM
CUMBERLAND
Harrisburg
Philadelphia
Scranton
Wilmington
Camden
Gettysburg
Chambersburg
Carlisle
Lebanon
Reading
Lancaster
York
Allentown
Easton
Stroudsburg
Towanda
Montrose
Honesdale
Milford
Laporte
Williamsport
Bloomsburg
Danville
Sunbury
Lewisburg
Middleburgh
Mifflintown
New Bloomfield
Pottsville
Norristown
West Chester
Media
Doylestown
Mauch Chunk
Tunkhannock
Wilkes Barre
Elmira
Owego
Binghampton
Westminster
Frederick
Elkton
Belvidere
Flemington
Woodbury
Bridgeton
BLUE MOUNTAINS

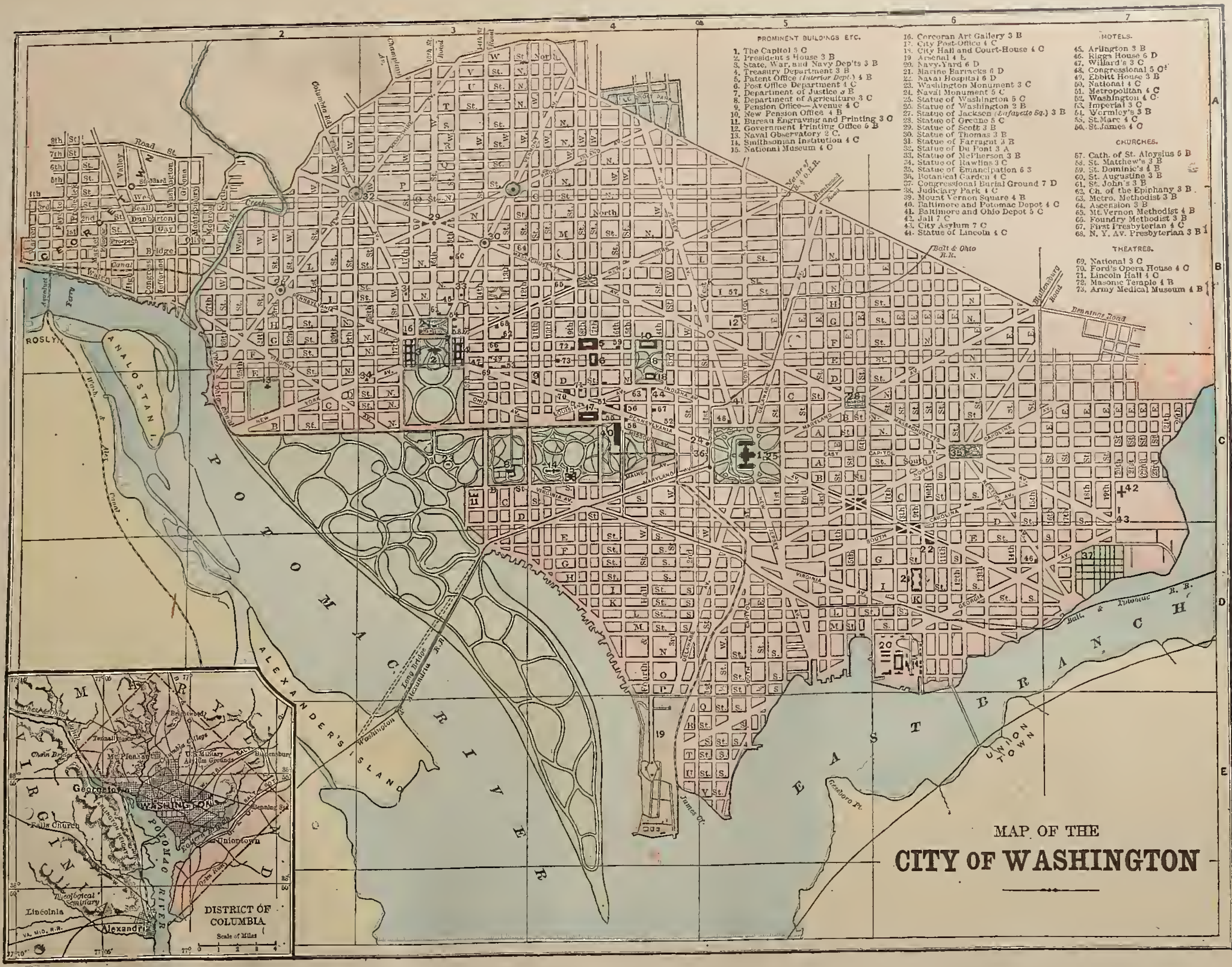

MARYLAND AND DELAWARE
SCALE OF MILES
0 5 10 15 20 25
Longitude West 77 from Greenwich
Longitude from 0 Washington
West
East
79
78
76
39
38
1
2
PHILADELPHIA
BALTIMORE
WASHINGTON
GARRETT
ALLEGHANY
WASHINGTON
FREDERICK
CARROLL
BALTIMORE
HARFORD
HOWARD
MONTGOMERY
CECIL
KENT
QUEEN ANNES
TALBOT
CAROLINE
DORCHESTER
WICOMICO
SOMERSET
WORCESTER
CALVERT
CHARLES
SAINT MARY'S
NEW CASTLE
KENT
SUSSEX
DELAWARE
MINERAL
HAMPSHIRE
MORGAN
BERKELEY
JEFFERSON
HARDY
FREDERICK
CLARKE
LOUDOUN
FAIRFAX
PRINCE WILLIAM
FAUQUIER
WARREN
SHENANDOAH
ROCKINGHAM
PAGE
RAPPAHANNOCK
CULPEPER
STAFFORD
KING GEORGE
WESTMORELAND
NORTHUMBERLAND
LANCASTER
RICHMOND
ESSEX
CAROLINE
SPOTSYLVANIA
ORANGE
MADISON
GREENE
ALBEMARLE
LOUISA
FLUVANNA
NELSON
AUGUSTA
ACCOMACK
NEW JERSEY


MAP OF
BALTIMORE
REFERENCE TO FIGURES.
PROMINENT BUILDINGS ETC.
1. Athenæum 4 E
2. Battle Monument 4 E
3. Blind Asylum 1 F
4. City Hall 4 F
5. Exchange 5 F
6. Epis. Church Home 4 G
7. Jail 3 F
8. Masonic Temple 4 E
9. Maryland Institute 4 F
10. Merchants' Shot Tower 4 F
11. Mt. Hope Hospital 2 D
12. Odd Fellows Hall 4 F
13. Penitentiary 3 F
14. Rialto Building 5 F
15. U. S. Court House 4 F
16. Washington Monument 3 E
17. Wells & McComas Monument 3 G
18. Wildey Monument 4 G
19. Y. Men's Chris. Asso. 4 E
20. Peabody Institute 3 E
HOTELS.
21. Carrollton House 5 E
22. Barnum's 4 E
23. Eutaw House 4 E
24. Maltby House 5 E
25. Mount Vernon 3 E
26. Guy's 4 E
CHURCHES.
27. Mt. Vernon 3 E (Methodist)
28. First Presbyterian 3 E
29. Cathedral 4 E
30. St. Alphonsus 4 E
31. St. Vincent de Paul 4 F
32. St. Ignatius Loyola 3 E
33. Grace Church 3 E
34. Emanuel 3 E
35. Christ 3 F
36. St. Paul (Episcopal) 4 E
37. St. Peter's
38. Unitarian 4 E
39. Eutaw Place Baptist 3 D
40. Brown Memorial 2 D
41. Westminster 4 D
42. Synagogue 4 G
THEATRES.
43. Ford's Grand Opera H. 4 E
44. Academy of Music 4 E
45. Holliday St. Theatre 4 F
46. Front St. Theatre 4 F
47. Concordia Opera House 5 E
DEPOTS.
48. Phil. Wil. & Balt. R. R. 5 G
49. Union R. R. 2 E
50. Balt. & Ohio R. R. 5 E
51. Nor. Central R. R. & Balt. & Potomac R. R. 4 F
52. Bolton Depot 2 E
53. Western Md. R. R.
Scale.—The Squares represented on the side of map, by 1 2 3 A B C &c. are ½ mile apart.


PITTSBURGH .... Colored 🟥
ALLEGHENY CITY .... Colored 🟨
SHALER TOWNS
MILLVALE
Reserve Township Line
City Line
Bellevue Cem.
UNIONDALE CEMETERY
Woods Run Sta.
Superior Sta.
Jacks Run Sta.
Verner Sta.
Herrs Sta.
Pittsburgh Ft. Wayne & Chicago R.R.
West Penn R.R.
OHIO RIVER
BRUNOTS ISL.
ALLEGHENY RIVER
Herrs Isl.
Wainwrights Island
MONONGAHELA
McKees Locks
Charters
Chartiers Cr.
Pittsb. & Lake Erie
CHARTIERS TOWNSHIP
TEMPERANCEVILLE
Pittsb. Cin. & St. Louis
MT. WASHINGTON
SHALERVILLE
UNION TOWNSHIP
B. & O. Depot
Birmingham Sta.
1 Mile
2 Miles
3 Miles
4 Miles

PITTSBURGH
AND
ALLEGHENY CITY

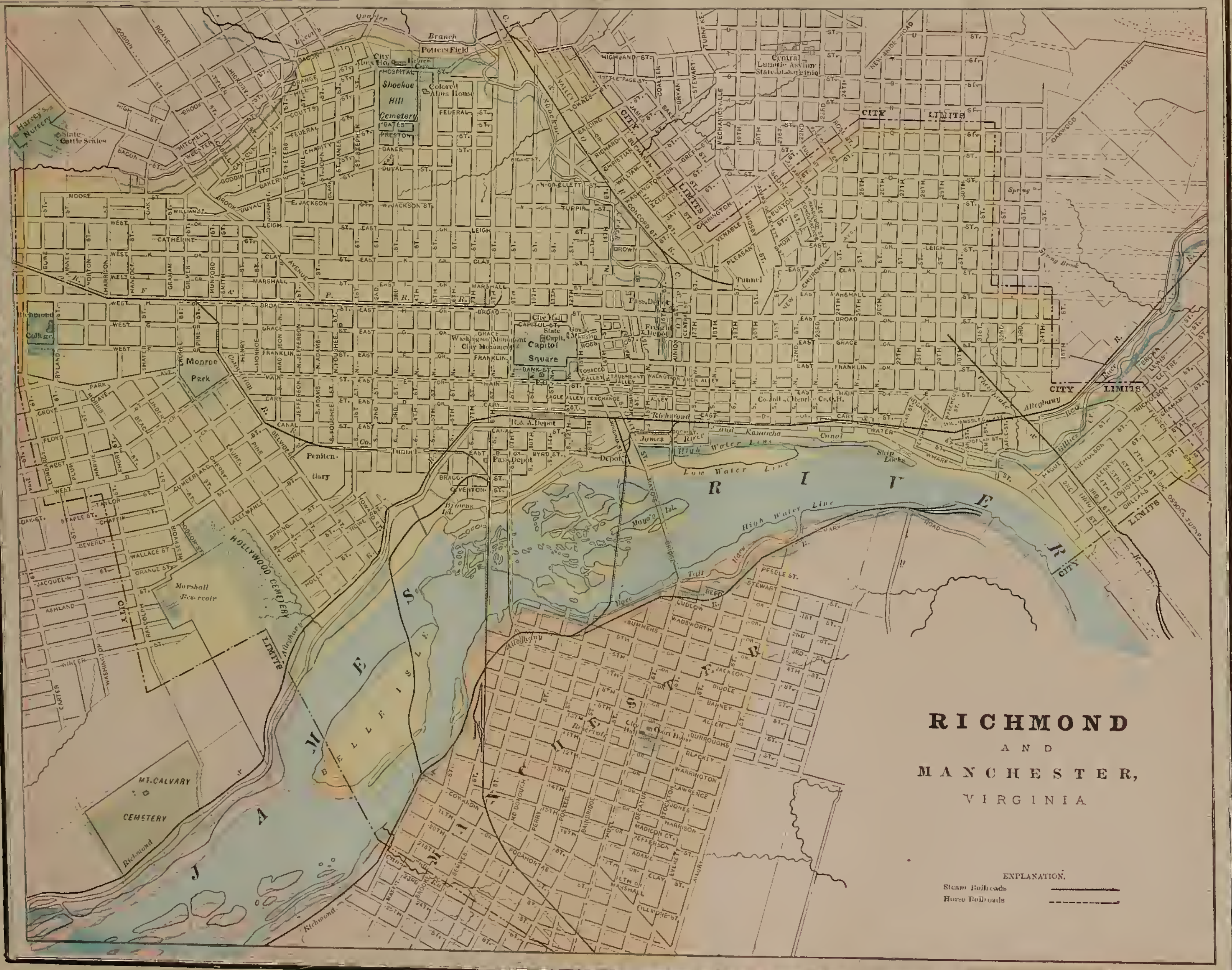

R I V E R
Allegheny
Valley
R. R.
City Pumping Sta.
Brilliant Sta.
Waring Sta.
Sharpsburgh Sta.
Highland Reservoir
Pine Creek Sta.
TOWNSHIP
McCandless Sta.
ALLEGHENY CEMETERY
ST. MARY'S CEMETERY
St. Peter's Lutheran Cemetery
LEMINGTON AV.
6 Miles
5 Miles
4 Miles
3 Miles
PENN TOWNSHIP
City Line
Silver Lake
BLOOMFIELD
Pennsylvania
Liberty Sta.
Torrens Sta.
STOCKYARDS
Dallas Sta.
Brushton Sta.
HOMEWOOD CEMETERY
PARK
WILKINS TOWNSHIP
Washington's Island
Allegheny
ARSENAL
U.S.
SHADYSIDE
MINERSVILLE
BELLEFIELD
OAKLAND
LINDEN GROVE
Linden Sta.
Laughlin Sta.
Four Mile Run
Nine Mile Run
FORWARD
GREENFIELD
NORTH HOMESTEAD
City Farm Sta.
Salt Works Sta.
Ohio
Browns Sta.
Hazelwood Sta.
HAZELWOOD
GLENWOOD
Glenwood Sta.
Baltimore & Ohio
R. R.
M O N O N G A H E L A
LOWER ST. CLAIR
Arlington St.
City Line
P. V. & C.
R. R.

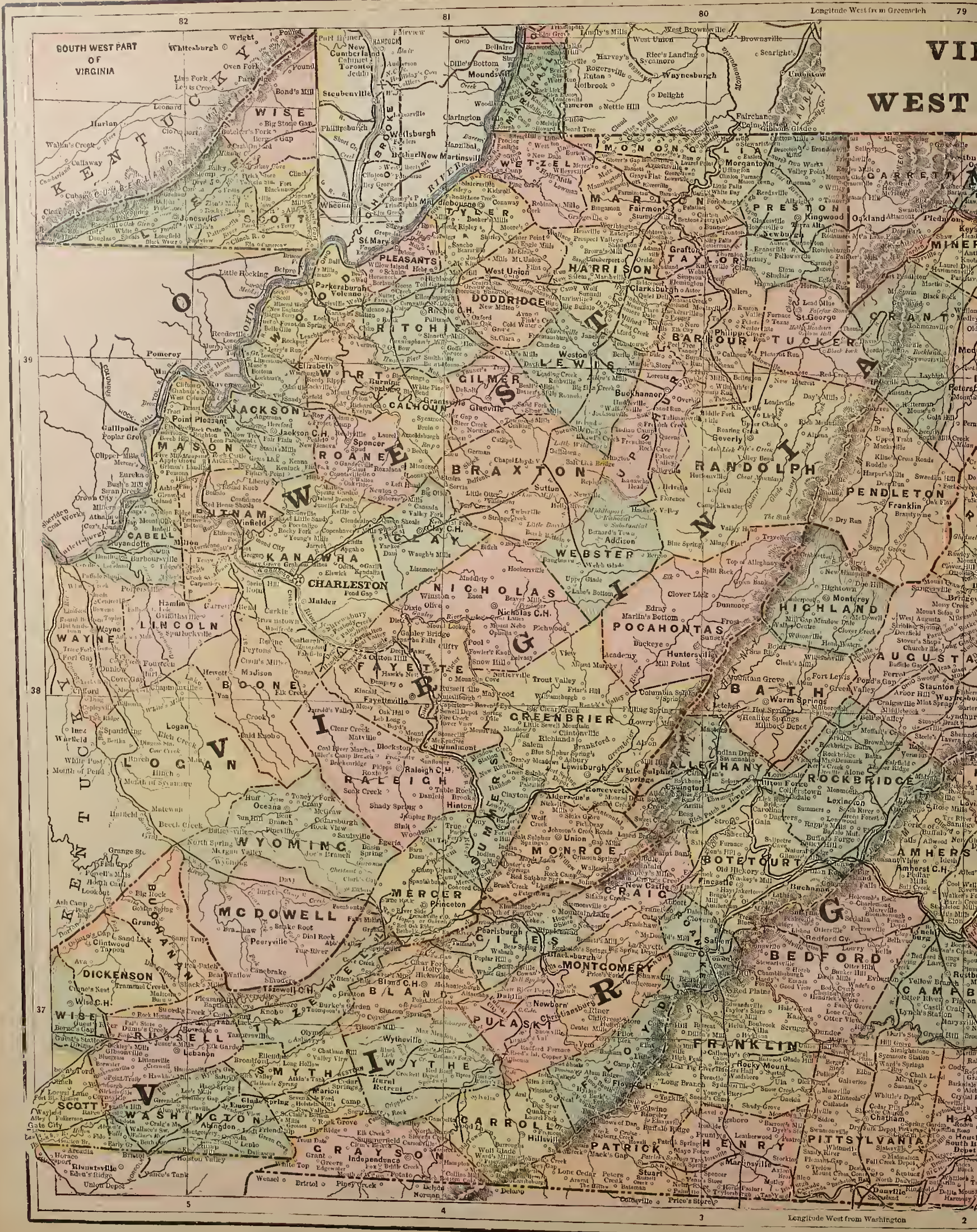


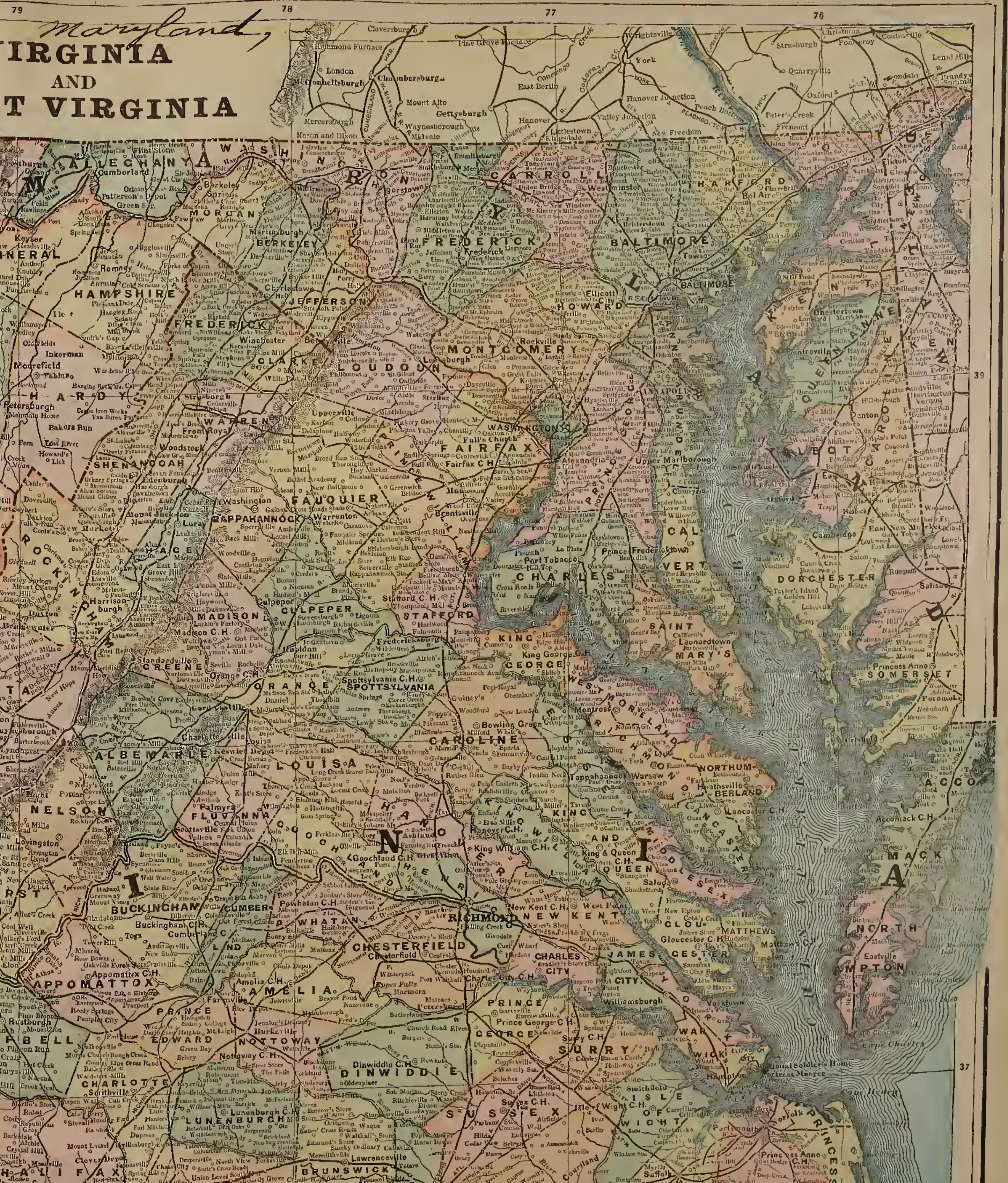
MAP OF THE

CITY OF WASHINGTON

PROMINENT BUILDINGS ETC.
1. The Capitol 5 C
2. President's House 3 B
3. State, War, and Navy Dep'ts 3 B
4. Treasury Department 3 B
5. Patent Office (Interior Dept.) 4 B
6. Post Office Department 4 C
7. Department of Justice 3 B
8. Department of Agriculture 3 C
9. Pension Office—Avenue 4 C
10. New Pension Office 4 B
11. Bureau Engraving and Printing 3 C
12. Government Printing Office 5 B
13. Naval Observatory 2 C.
14. Smithsonian Institution 4 C
15. National Museum 4 C
16. Corcoran Art Gallery 3 B
17. City Post-Office 4 C
18. City Hall and Court-House 4 C
19. Arsenal 4 E
20. Navy-Yard 6 D
21. Marine Barracks 6 D
22. Naval Hospital 6 D
23. Washington Monument 3 C
24. Naval Monument 5 C
25. Statue of Washington 5 C
26. Statue of Washington 2 B
27. Statue of Jackson (Lafayette Sq.) 3 B
28. Statue of Greene 5 C
29. Statue of Scott 3 B
30. Statue of Thomas 3 B
31. Statue of Farragut 3 B
32. Statue of Du Pont 3 A
33. Statue of McPherson 3 B
34. Statue of Rawlins 3 C
35. Statue of Emancipation 6 3
36. Botanical Garden 4 C
37. Congressional Burial Ground 7 D
38. Judiciary Park 4 C
39. Mount Vernon Square 4 B
40. Baltimore and Potomac Depot 4 C
41. Baltimore and Ohio Depot 5 C
42. Jail 7 C
43. City Asylum 7 C
44. Statue of Lincoln 4 C
HOTELS.
45. Arlington 3 B
46. Riggs House 6 D
47. Willard's 3 C
48. Congressional 5 C
49. Ebbitt House 3 B
50. National 4 C
51. Metropolitan 4 C
52. Washington 4 C
53. Imperial 3 C
54. Wormley's 3 B
55. St. Marc 4 C
56. St. James 4 C
CHURCHES.
57. Cath. of St. Aloysius 5 B
58. St. Matthew's 3 B
59. St. Dominic's 4 B
60. St. Augustine 3 B
61. St. John's 3 B
62. Ch. of the Epiphany 3 B
63. Metro. Methodist 3 B
64. Ascension 3 B
65. Mt. Vernon Methodist 4 B
66. Foundry Methodist 3 B
67. First Presbyterian 4 C
68. N. Y. Av. Presbyterian 3 B
THEATRES.
69. National 3 C
70. Ford's Opera House 4 C
71. Lincoln Hall 4 C
72. Masonic Temple 4 B
73. Army Medical Museum 4 B
POTOMAC RIVER
EASTERN BRANCH
ALEXANDER'S ISLAND
ANALOSTAN I.
ROSLYN
GEORGETOWN
UNION TOWN
Long Bridge
Balt & Ohio R.R.
Bennings Road
DISTRICT OF COLUMBIA
Scale of Miles
MARYLAND
VIRGINIA
WASHINGTON
Georgetown
Alexandria
Uniontown
Falls Church
Lincolnia


RICHMOND
AND
MANCHESTER,
VIRGINIA
EXPLANATION.
Steam Railroads
Horse Railroads
JAMES RIVER
MANCHESTER
Capitol Square
City Hall
Washington Monument
Clay Monument
Monroe Park
Hollywood Cemetery
Mt. Calvary Cemetery
Shockoe Hill Cemetery
Colored Alms House
Potters Field
Central Lunatic Asylum State of Virginia
Richmond College
Harvey's Nursery
State Cattle Scales
Marshall Reservoir
Peniten-tiary
Mayo's Isl.
Belle Isle
Brown's Isl.
Shockoe Creek
Tunnel
Pass. Depot
R. & A. Depot
Ship Locks
Richmond and Kanawha Canal
City Limits
High Water Line
Low Water Line
Mayo's Bridge
Court House


VI
WEST
Longitude West from Greenwich
82
81
80
79
39
38
37
5
4
3
2
Longitude West from Washington
SOUTH WEST PART OF VIRGINIA
KENTUCKY
WISE
SCOTT
OHIO
WEST VIRGINIA
VIRGINIA
HANCOCK
BROOKE
OHIO
MARSHALL
WETZEL
MONONGALIA
MARION
PRESTON
TYLER
PLEASANTS
DODDRIDGE
HARRISON
TAYLOR
BARBOUR
TUCKER
WOOD
RITCHIE
LEWIS
WIRT
GILMER
CALHOUN
UPSHUR
RANDOLPH
JACKSON
ROANE
BRAXTON
MASON
PUTNAM
CABELL
KANAWHA
CLAY
WEBSTER
WAYNE
LINCOLN
NICHOLAS
POCAHONTAS
BOONE
FAYETTE
GREENBRIER
LOGAN
RALEIGH
WYOMING
MERCER
MONROE
SUMMERS
MCDOWELL
GILES
CRAIG
BUCHANAN
DICKENSON
TAZEWELL
BLAND
MONTGOMERY
PULASKI
RUSSELL
SMYTH
WYTHE
CARROLL
WASHINGTON
GRAYSON
FLOYD
FRANKLIN
PATRICK
HENRY
PITTSYLVANIA
BEDFORD
ROANOKE
BOTETOURT
ALLEGHANY
ROCKBRIDGE
BATH
HIGHLAND
AUGUSTA
PENDLETON
GRANT
MINERAL
GARRETT
AMHERST
CAMPBELL
CHARLESTON
Wheeling
Parkersburg
Clarksburg
Morgantown
Grafton
Fairmont
Point Pleasant
Lynchburg
Staunton
Lewisburg
Princeton
Abingdon
Wytheville
Christiansburg
Salem
Danville
Martinsville
Rocky Mount
Hinton
Beverly
Huntersville
Monterey
Franklin
Lexington
Covington
Fincastle
Fayetteville
Nicholas C.H.
Sutton
Weston
Buckhannon
Spencer
Elizabeth
Glenville
Grantsville
Harrisville
West Union
Middlebourne
New Martinsville
Moundsville
Wellsburg
Kingwood
St. George
Philippi
Ripley
Winfield
Hamlin
Wayne
Madison
Logan
Oceana
Pearisburg
Union
New Castle
Tazewell C.H.
Lebanon
Jonesville
Gate City
Estillville
Marion
Hillsville
Independence
Stuart
Floyd C.H.
Liberty
Bedford C.H.
Chatham
Warm Springs
Buffalo
Barboursville
Guyandotte
Jackson C.H.
Kanawha River
New River
Greenbrier River
Ohio River

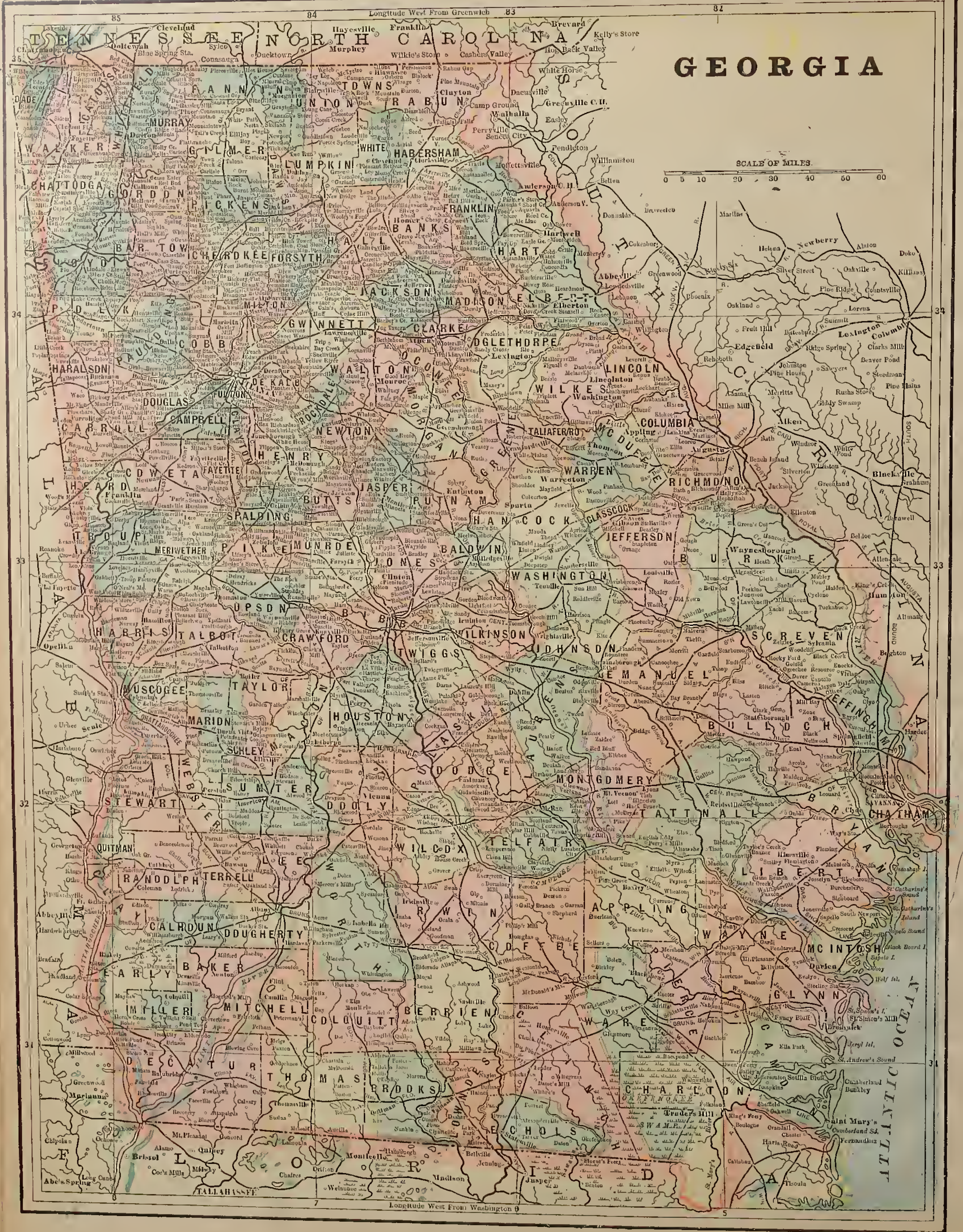


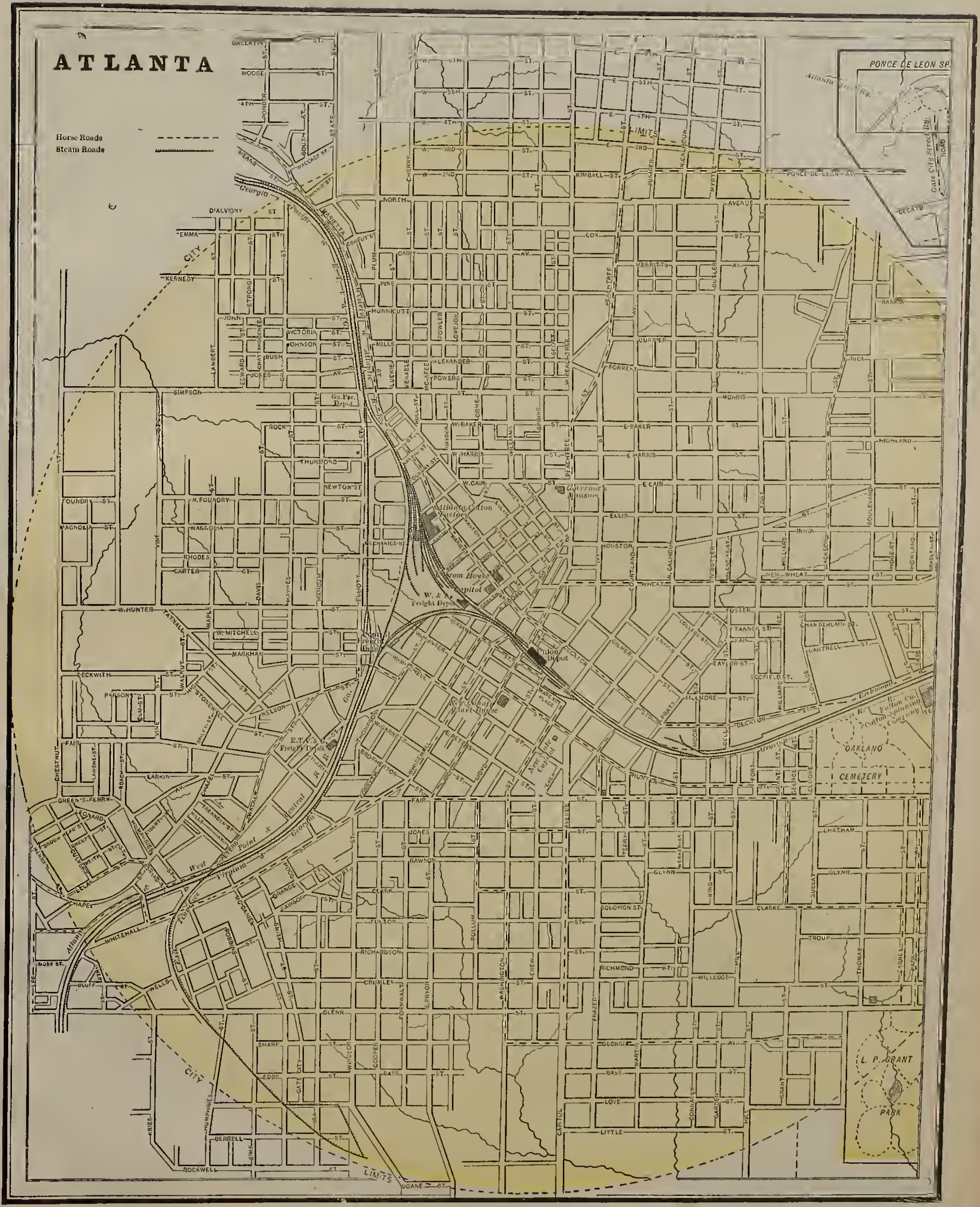
Maryland,

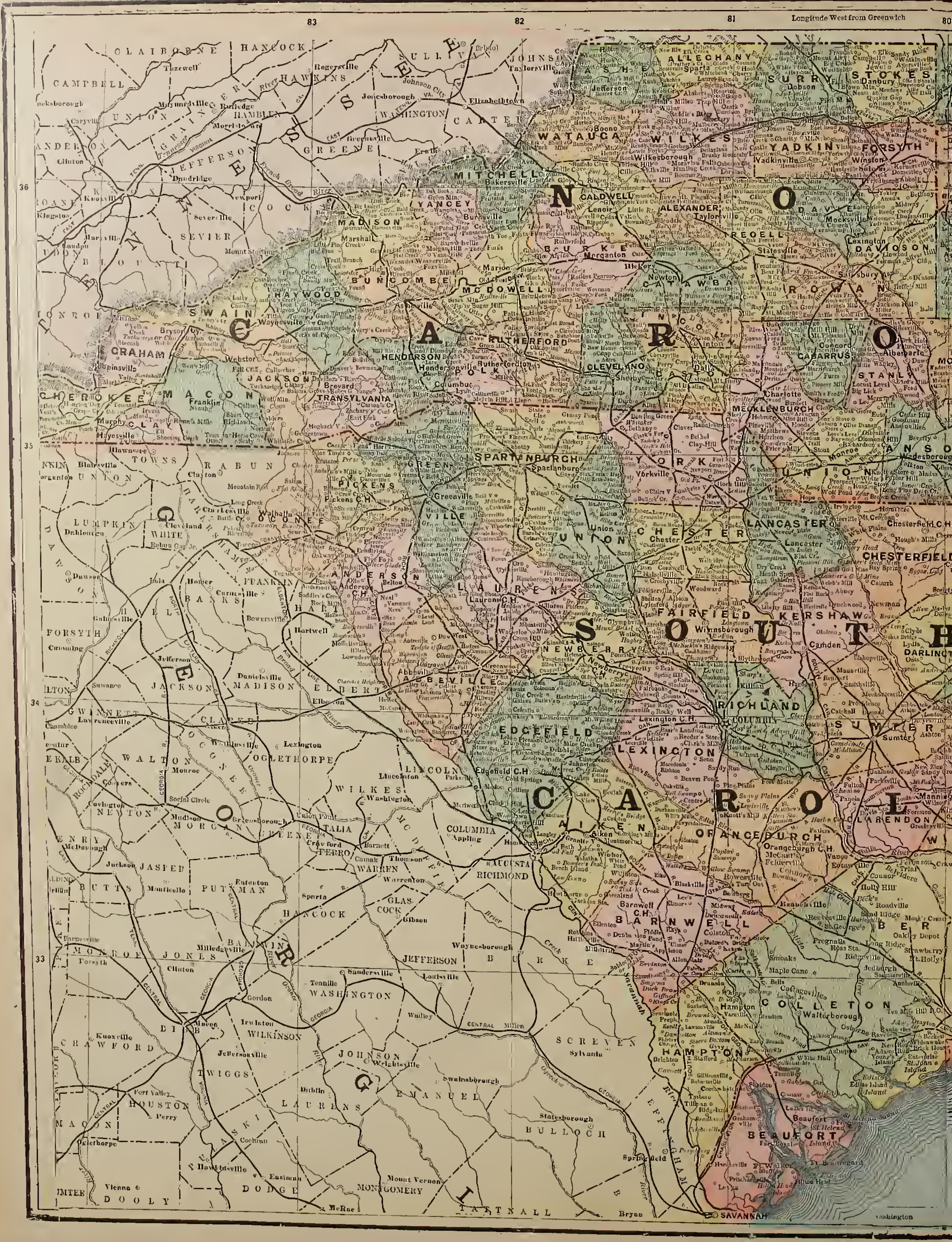
IRGINIA

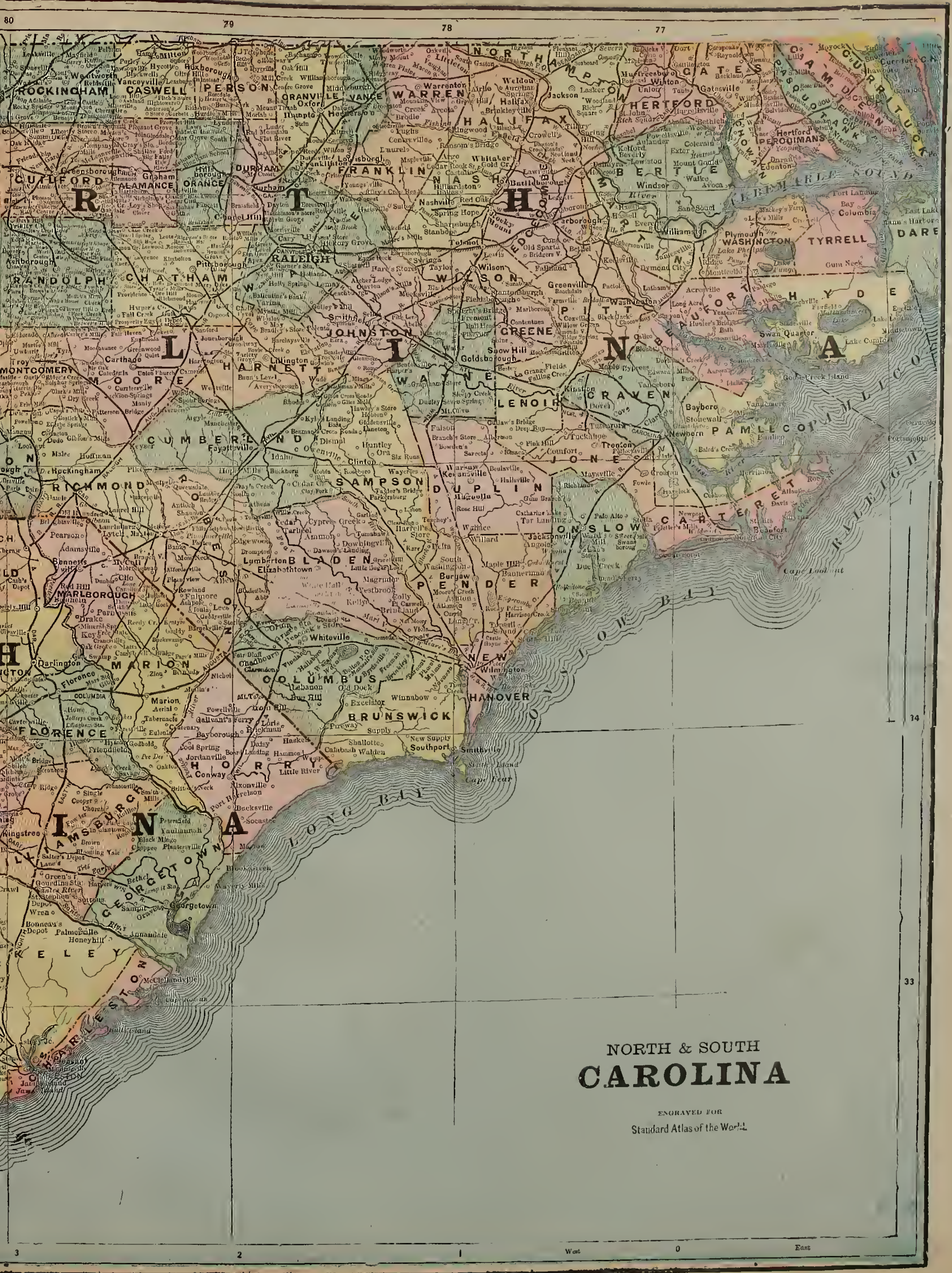
AND

T VIRGINIA


GEORGIA
SCALE OF MILES.
0 5 10 20 30 40 50 60
Longitude West From Greenwich
85
84
83
82
Longitude West From Washington
7
6
5
35
34
33
32
31
TENNESSEE
NORTH CAROLINA
SOUTH CAROLINA
ALABAMA
FLORIDA
ATLANTIC OCEAN
DADE
WALKER
CATOOSA
WHITFIELD
MURRAY
FANNIN
UNION
TOWNS
RABUN
GILMER
LUMPKIN
WHITE
HABERSHAM
CHATTOOGA
GORDON
PICKENS
DAWSON
FRANKLIN
BANKS
HART
FLOYD
BARTOW
CHEROKEE
FORSYTH
HALL
JACKSON
MADISON
ELBERT
POLK
PAULDING
COBB
MILTON
GWINNETT
CLARKE
OGLETHORPE
HARALSON
DOUGLAS
FULTON
DE KALB
WALTON
OCONEE
LINCOLN
WILKES
CARROLL
CAMPBELL
CLAYTON
ROCKDALE
NEWTON
MORGAN
GREENE
TALIAFERRO
COLUMBIA
McDUFFIE
HEARD
COWETA
FAYETTE
HENRY
JASPER
PUTNAM
WARREN
RICHMOND
SPALDING
BUTTS
HANCOCK
GLASSCOCK
JEFFERSON
TROUP
MERIWETHER
PIKE
MONROE
JONES
BALDWIN
WASHINGTON
BURKE
HARRIS
TALBOT
UPSON
BIBB
CRAWFORD
TWIGGS
WILKINSON
JOHNSON
SCREVEN
MUSCOGEE
TAYLOR
MACON
HOUSTON
PULASKI
LAURENS
EMANUEL
BULLOCH
EFFINGHAM
CHATTAHOOCHEE
MARION
SCHLEY
DOOLY
DODGE
MONTGOMERY
TATTNALL
BRYAN
CHATHAM
STEWART
WEBSTER
SUMTER
TELFAIR
QUITMAN
RANDOLPH
TERRELL
LEE
WILCOX
LIBERTY
CLAY
CALHOUN
DOUGHERTY
WORTH
IRWIN
APPLING
WAYNE
McINTOSH
EARLY
BAKER
COFFEE
GLYNN
MILLER
MITCHELL
COLQUITT
BERRIEN
WARE
PIERCE
CAMDEN
DECATUR
THOMAS
BROOKS
LOWNDES
CLINCH
CHARLTON
ECHOLS
OKEFENOKEE SWAMP


ATLANTA
Horse Roads
Steam Roads
PONCE DE LEON SP.
Atlanta Street Ry.
Gate City Street Ry.
PONCE-DE-LEON-AV.
LIMITS
CITY
Georgia Pacific
Ga. Pas. Depot
Atlanta Cotton Factory
Governor's Mansion
Custom House
Capitol
W. & A. Freight Depot
Union Depot
New County Court House
New State Capitol
E.T.V. & G. Freight Depot
Central Freight Depot
West Point & Virginia & Georgia
Central R.R.
Richmond & Danville
Fulton Co. Cotton Spinning Company
OAKLAND CEMETERY
L. P. GRANT PARK
MARIETTA
PEACHTREE
WHITEHALL
DECATUR
SIMPSON
W. HUNTER
HUNTER
FAIR
NORTH AVENUE
KIMBALL ST.
BOULEVARD
CAPITOL
WASHINGTON
PULLUM
CLARKE
GEORGIA AV.
LITTLE ST.
ROCKWELL
DOANE ST.


Longitude West from Greenwich
83
82
81
80
36
35
34
33
TENNESSEE
NORTH CAROLINA
SOUTH CAROLINA
GEORGIA
CLAIBORNE
HANCOCK
SULLIVAN
JOHNSON
CAMPBELL
UNION
GRAINGER
HAWKINS
HAMBLEN
WASHINGTON
CARTER
JEFFERSON
GREENE
COCKE
SEVIER
BLOUNT
MONROE
ALLEGHANY
ASHE
SURRY
STOKES
WATAUGA
WILKES
YADKIN
FORSYTH
MITCHELL
YANCEY
CALDWELL
ALEXANDER
DAVIE
MADISON
BURKE
IREDELL
DAVIDSON
BUNCOMBE
McDOWELL
CATAWBA
ROWAN
HAYWOOD
SWAIN
GRAHAM
HENDERSON
RUTHERFORD
LINCOLN
CABARRUS
STANLY
JACKSON
POLK
CLEVELAND
GASTON
MECKLENBURG
CHEROKEE
MACON
TRANSYLVANIA
CLAY
UNION
ANSON
TOWNS
RABUN
PICKENS
GREENVILLE
SPARTANBURG
YORK
OCONEE
LUMPKIN
WHITE
HABERSHAM
UNION
CHESTER
LANCASTER
CHESTERFIELD
ANDERSON
LAURENS
FAIRFIELD
KERSHAW
DARLINGTON
DAWSON
BANKS
FRANKLIN
HART
ABBEVILLE
NEWBERRY
FORSYTH
JACKSON
MADISON
ELBERT
EDGEFIELD
RICHLAND
SUMTER
GWINNETT
CLARKE
OGLETHORPE
LEXINGTON
DE KALB
WALTON
OCONEE
LINCOLN
ROCKDALE
NEWTON
MORGAN
GREENE
WILKES
TALIAFERRO
McDUFFIE
COLUMBIA
AIKEN
ORANGEBURG
CLARENDON
HENRY
JASPER
WARREN
RICHMOND
BUTTS
PUTNAM
HANCOCK
GLASCOCK
BARNWELL
BERKELEY
MONROE
JONES
BALDWIN
JEFFERSON
BURKE
WASHINGTON
COLLETON
BIBB
WILKINSON
SCREVEN
HAMPTON
CRAWFORD
TWIGGS
JOHNSON
EMANUEL
HOUSTON
LAURENS
PULASKI
BULLOCH
EFFINGHAM
BEAUFORT
MACON
DOOLY
DODGE
MONTGOMERY
TATTNALL
Bryan
Savannah
Columbia
Augusta
Charlotte
Asheville
Greenville
Spartanburg
Beaufort
Camden
Sumter
Washington


80
79
78
77
N O R T H
C A R O L I N A
S O U T H
C A R O L I N A
ROCKINGHAM
CASWELL
PERSON
GRANVILLE
VANCE
WARREN
NORTHAMPTON
HALIFAX
GATES
HERTFORD
CHOWAN
PERQUIMANS
PASQUOTANK
CAMDEN
CURRITUCK
GUILFORD
ALAMANCE
ORANGE
DURHAM
FRANKLIN
NASH
EDGECOMBE
MARTIN
BERTIE
WASHINGTON
TYRRELL
DARE
RANDOLPH
CHATHAM
WAKE
RALEIGH
WILSON
PITT
BEAUFORT
HYDE
MONTGOMERY
MOORE
HARNETT
JOHNSTON
GREENE
WAYNE
LENOIR
CRAVEN
PAMLICO
CUMBERLAND
SAMPSON
DUPLIN
JONES
ONSLOW
CARTERET
RICHMOND
ROBESON
BLADEN
PENDER
MARLBOROUGH
MARION
COLUMBUS
NEW HANOVER
BRUNSWICK
HORRY
FLORENCE
WILLIAMSBURG
GEORGETOWN
BERKELEY
CHARLESTON
ALBEMARLE SOUND
PAMLICO SOUND
RALEIGH BAY
ONSLOW BAY
LONG BAY
Cape Lookout
Cape Fear
34
33
3
2
1
West
0
East

NORTH & SOUTH
CAROLINA

ENGRAVED FOR
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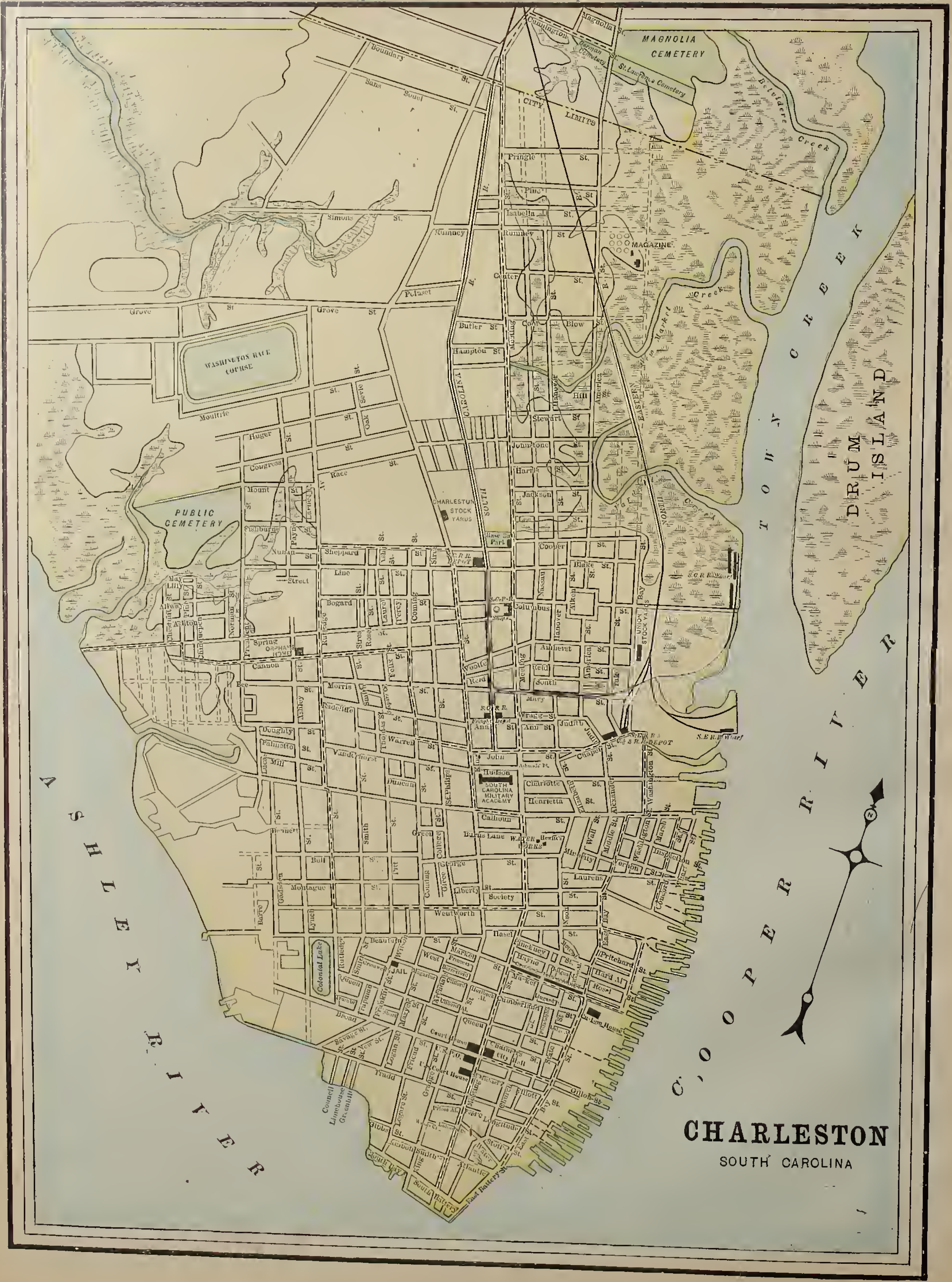
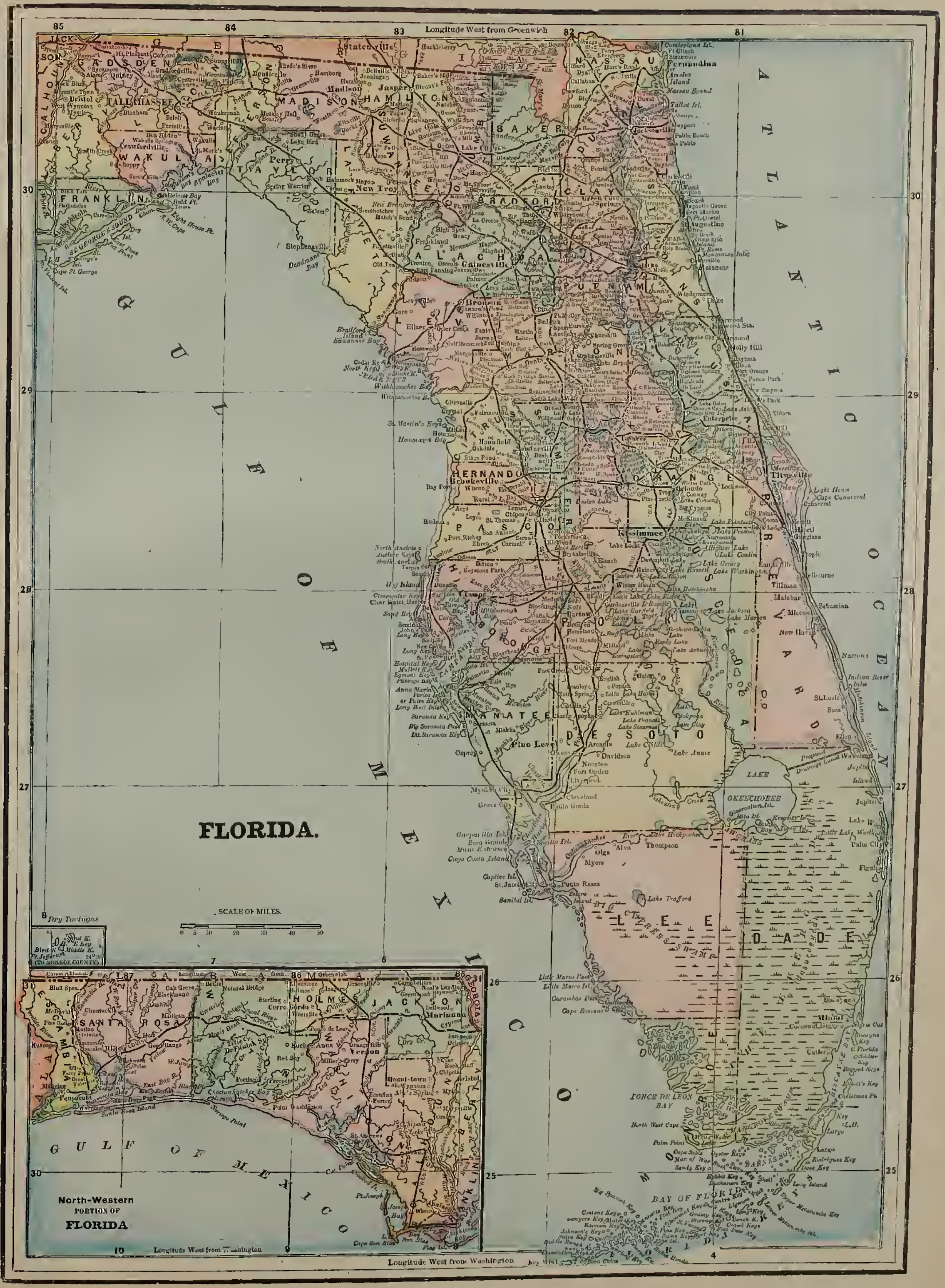
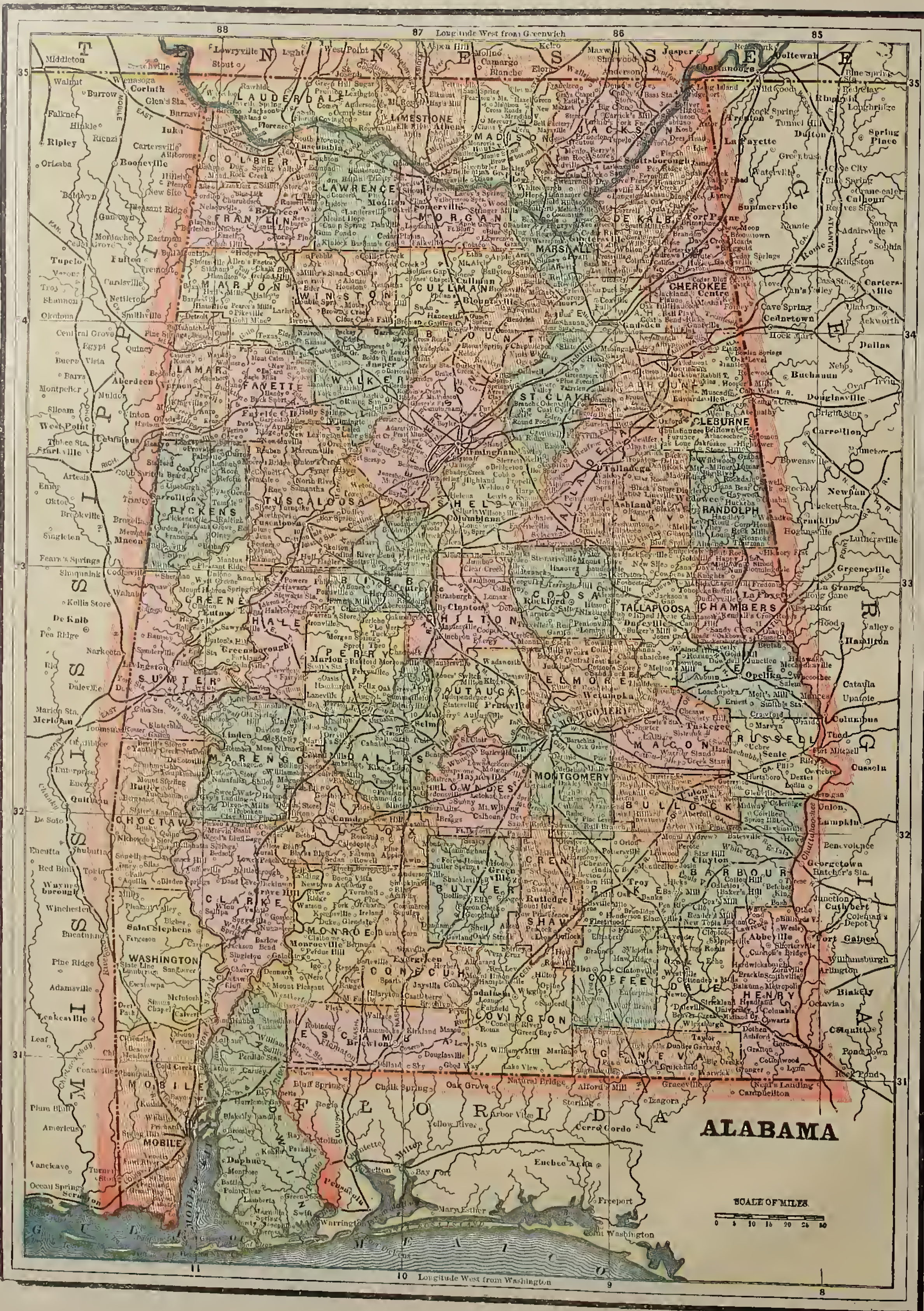
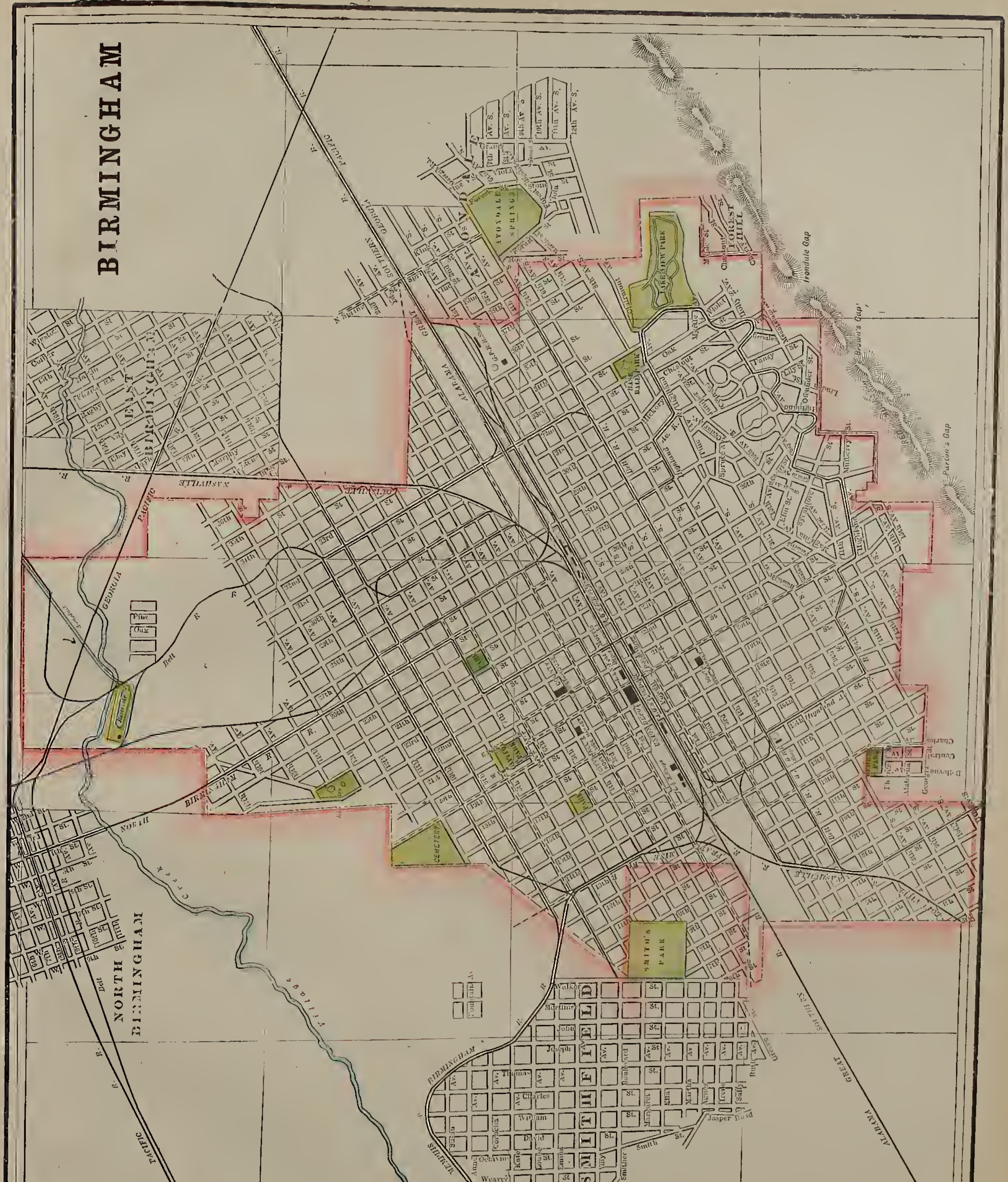

MAGNOLIA CEMETERY
Magnolia St.
Cunnington
St. Lawrence Cemetery
Belvidere Creek
Boundary St.
Sans Souci St.
CITY LIMITS
Simons St.
Rumney
Pulaski
Grove St.
WASHINGTON RACE COURSE
Moultrie
Huger St.
Congress
Race St.
Mount
PUBLIC CEMETERY
Fishburne
Nunan St.
Sheppard
Line
Bogard
Spring
ORPHAN HOUSE
Cannon
Bee
Morris
Radcliffe
Doughty
Palmetto
Mill
Vanderhorst
Warren
Duncan
Bull
Montague
Wentworth
Beaufain
Colonial Lake
JAIL
Broad
Savage St.
Tradd
Gibbes St.
South Bay
South Battery
East Battery St.
Atlantic
Longitude
Court House
City Hall
P.O.
Custom House
Queen
Cumberland
Hasel
Society
Laurens
Calhoun
Henrietta
Charlotte
SOUTH CAROLINA MILITARY ACADEMY
Hudson
John
Chapel St.
Judith
Wragg St.
Mary
Ann St.
S.C.R.R. Freight Depot
Reid
Woolfe
Columbus
Amherst
Cooper
Blake
Nassau
Hanover
Aiken
America
Bay
Meeting
King
Rutledge
Ashley
Coming
St. Philip
Smith
Pitt
College
Green
Elizabeth
Alexander
Washington St.
East Bay
Concord
Pritchard
Hard Al.
Hayne
Market
Magazine
Vernon
Inspection
Marsh
Burns Lane
WATER WORKS
Wall St.
Middle St.
Minority
CHARLESTON STOCK YARDS
S.C.R.R. DEPOT
Base Ball Park
Johnstone
Harris
Jackson
Stewart
Hill
Hampton St.
Butler St.
Blow St.
Center
Isabella
Pine
Pringle St.
MAGAZINE
Cemetery
EASTERN
Market Creek
UNION STOCK YARDS
S.C.R.R. Wharf
N.E.R.R. Wharf
N.E. & S.C. & S.R.R. DEPOT
NORTH
SOUTH
CAROLINA R.R.
TOWN CREEK
DRUM ISLAND
COOPER RIVER
ASHLEY RIVER
Council
Limehouse
Greenhill
N

CHARLESTON

SOUTH CAROLINA

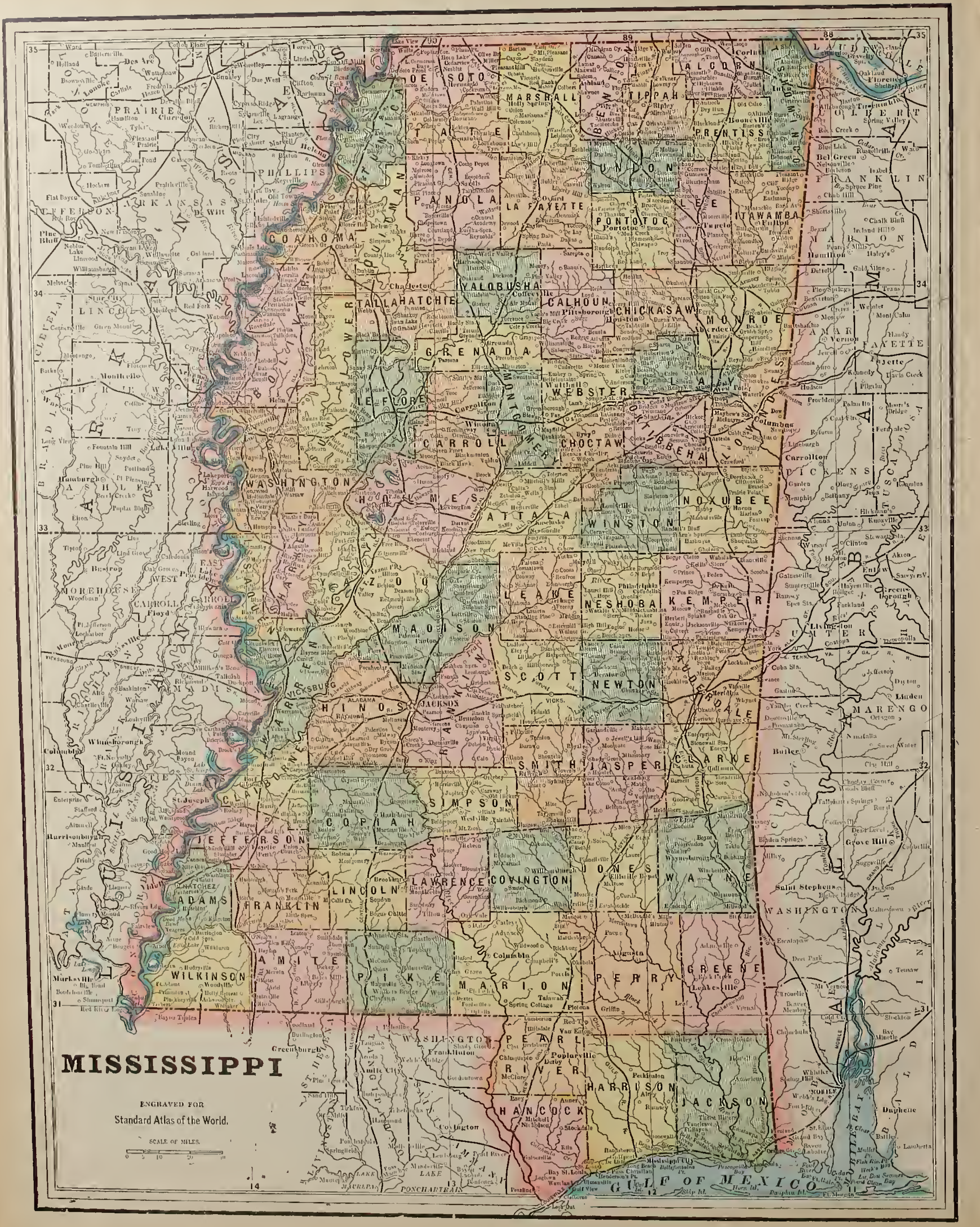

FLORIDA.
North-Western PORTION OF FLORIDA
Longitude West from Greenwich
Longitude West from Washington
SCALE OF MILES.
0 5 10 20 30 40 50
GULF OF MEXICO
ATLANTIC OCEAN
NASSAU
DUVAL
BAKER
HAMILTON
MADISON
TAYLOR
LAFAYETTE
SUWANNEE
COLUMBIA
BRADFORD
CLAY
ST. JOHNS
PUTNAM
ALACHUA
LEVY
MARION
VOLUSIA
BREVARD
ORANGE
SUMTER
HERNANDO
PASCO
POLK
HILLSBOROUGH
MANATEE
DE SOTO
OSCEOLA
LEE
DADE
MONROE
FRANKLIN
WAKULLA
GADSDEN
LEON
JEFFERSON
CALHOUN
LIBERTY
ESCAMBIA
SANTA ROSA
WALTON
HOLMES
JACKSON
WASHINGTON
TALLAHASSEE
Jacksonville
Fernandina
Gainesville
Orlando
Tampa
Kissimmee
LAKE OKEECHOBEE
BIG CYPRESS
BAY OF FLORIDA
PONCE DE LEON BAY
FLORIDA KEYS
Key West
Dry Tortugas
Pensacola
Marianna
Apalachee Bay
St. George Sound
Cape St. George
Cape Canaveral
Indian River
Cape Sable
85
84
83
82
81
30
29
28
27
26
25
8
7
6
5
4
87
86
10
9


ALABAMA
SCALE OF MILES
0 5 10 15 20 25 30
Longitude West from Greenwich
88
87
86
85
Longitude West from Washington
11
10
9
8
35
34
33
32
31
TENNESSEE
GEORGIA
MISSISSIPPI
FLORIDA
GULF OF MEXICO
LAUDERDALE
LIMESTONE
MADISON
JACKSON
COLBERT
LAWRENCE
MORGAN
DE KALB
FRANKLIN
MARSHALL
CHEROKEE
MARION
WINSTON
CULLMAN
BLOUNT
ETOWAH
LAMAR
FAYETTE
WALKER
ST. CLAIR
CALHOUN
CLEBURNE
JEFFERSON
TALLADEGA
PICKENS
TUSCALOOSA
SHELBY
CLAY
RANDOLPH
BIBB
COOSA
TALLAPOOSA
CHAMBERS
GREENE
HALE
CHILTON
PERRY
SUMTER
AUTAUGA
ELMORE
LEE
MARENGO
DALLAS
MONTGOMERY
MACON
RUSSELL
LOWNDES
BULLOCK
CHOCTAW
WILCOX
BUTLER
CRENSHAW
PIKE
BARBOUR
CLARKE
MONROE
COFFEE
DALE
HENRY
WASHINGTON
CONECUH
COVINGTON
GENEVA
ESCAMBIA
MOBILE
BALDWIN
Montgomery
Mobile
Birmingham
Tuscaloosa
Huntsville
Selma
Chattanooga
Columbus
Meridian
Pensacola
Mobile Bay



BIRMINGHAM

EAST BIRMINGHAM
NORTH BIRMINGHAM
AVONDALE
AVONDALE SPRINGS
FOREST HILL
LAKEVIEW PARK
BASE BALL PARK
SMITH'S PARK
CEMETERY
SMITHFIELD
Irondale Gap
Brown's Gap
Parton's Gap
Village Creek
GEORGIA PACIFIC R. R.
ALABAMA GREAT SOUTHERN R. R.
LOUISVILLE & NASHVILLE R. R.
KANSAS CITY MEMPHIS & BIRMINGHAM R. R.
Belt R. R.
Jasper Road



MISSISSIPPI

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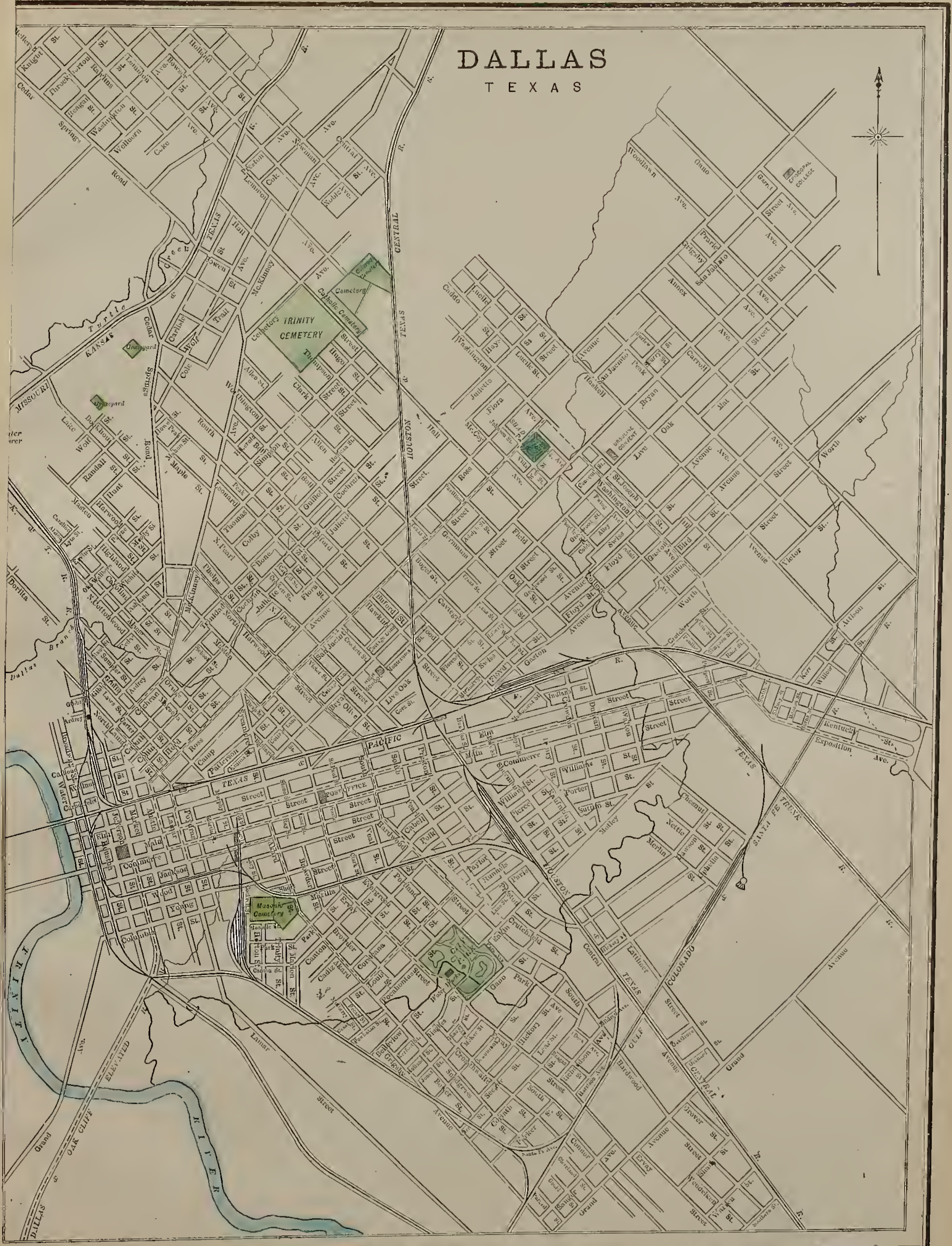
SCALE OF MILES.

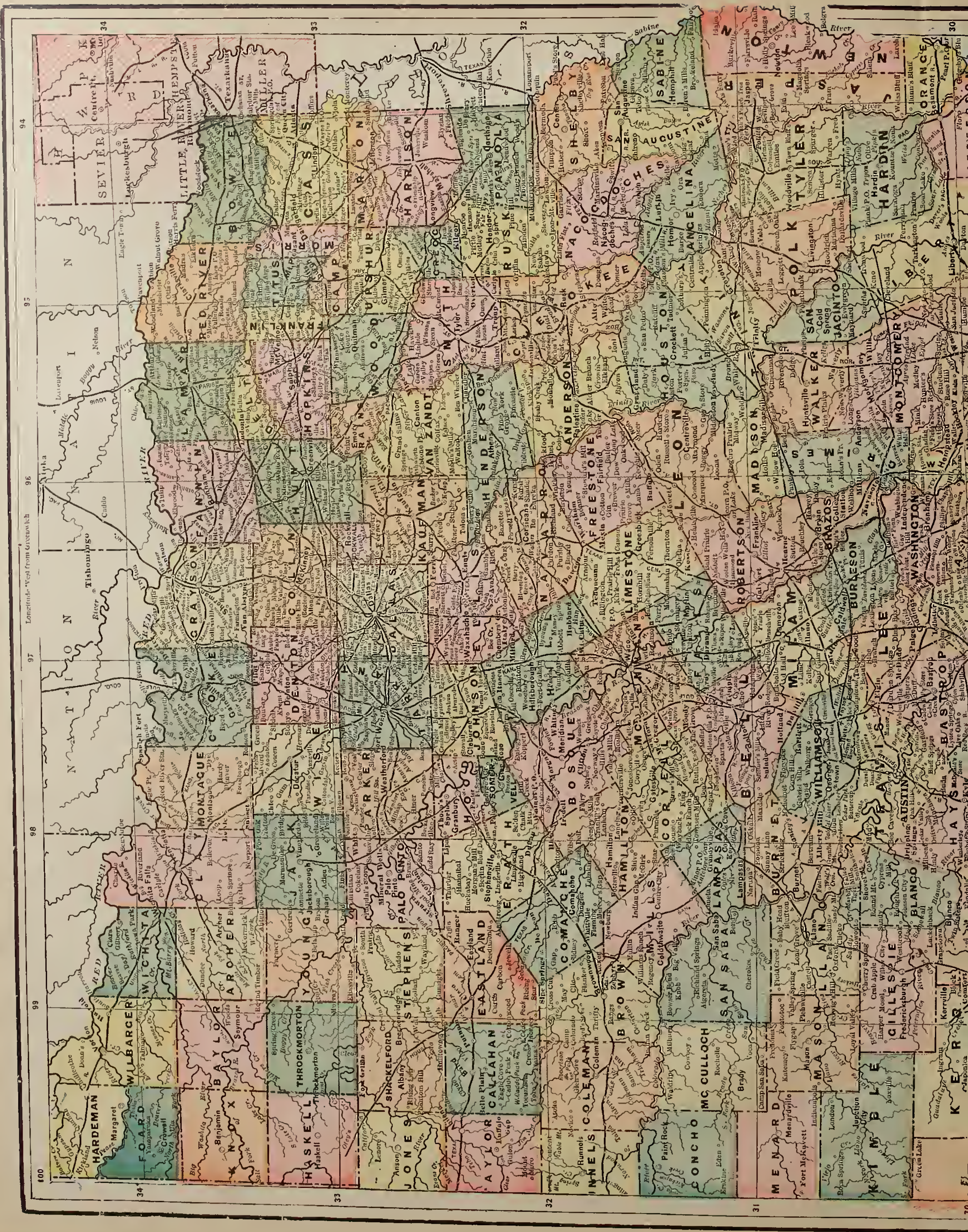
0 5 10 20 30
De Soto
Marshall
Benton
Tippah
Alcorn
Tishomingo
Tate
Tunica
Panola
La Fayette
Union
Prentiss
Lee
Itawamba
Pontotoc
Coahoma
Quitman
Yalobusha
Calhoun
Chickasaw
Monroe
Tallahatchie
Grenada
Bolivar
Sunflower
Leflore
Montgomery
Webster
Clay
Oktibbeha
Lowndes
Carroll
Choctaw
Washington
Holmes
Attala
Winston
Noxubee
Issaquena
Sharkey
Yazoo
Leake
Neshoba
Kemper
Madison
Scott
Newton
Lauderdale
Warren
Vicksburg
Hinds
Jackson
Rankin
Smith
Jasper
Clarke
Claiborne
Copiah
Simpson
Jefferson
Lawrence
Covington
Jones
Wayne
Adams
Natchez
Franklin
Lincoln
Wilkinson
Amite
Pike
Marion
Perry
Greene
Pearl River
Hancock
Harrison
Jackson
Gulf of Mexico
Arkansas
Louisiana
Alabama
Tennessee

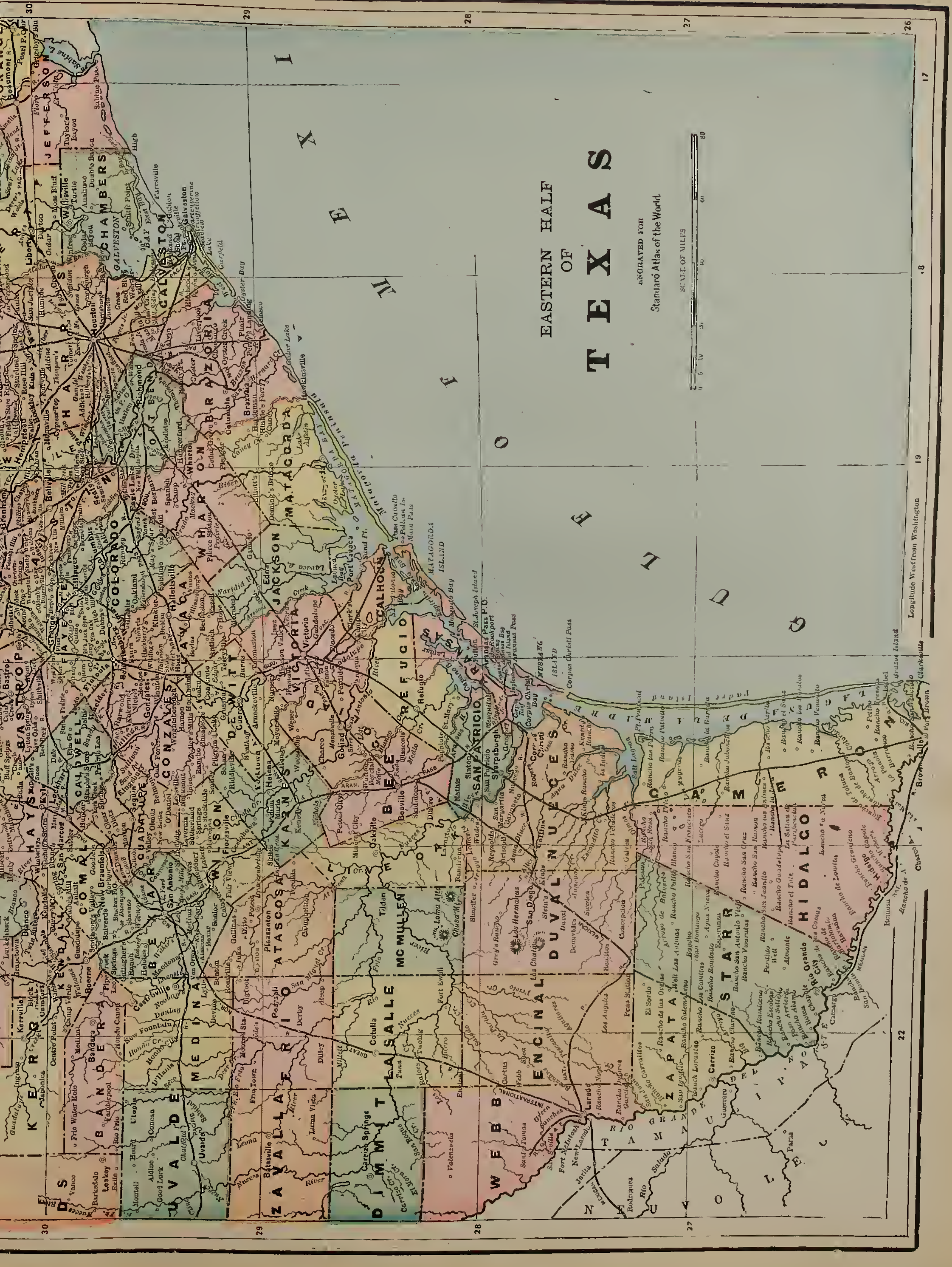


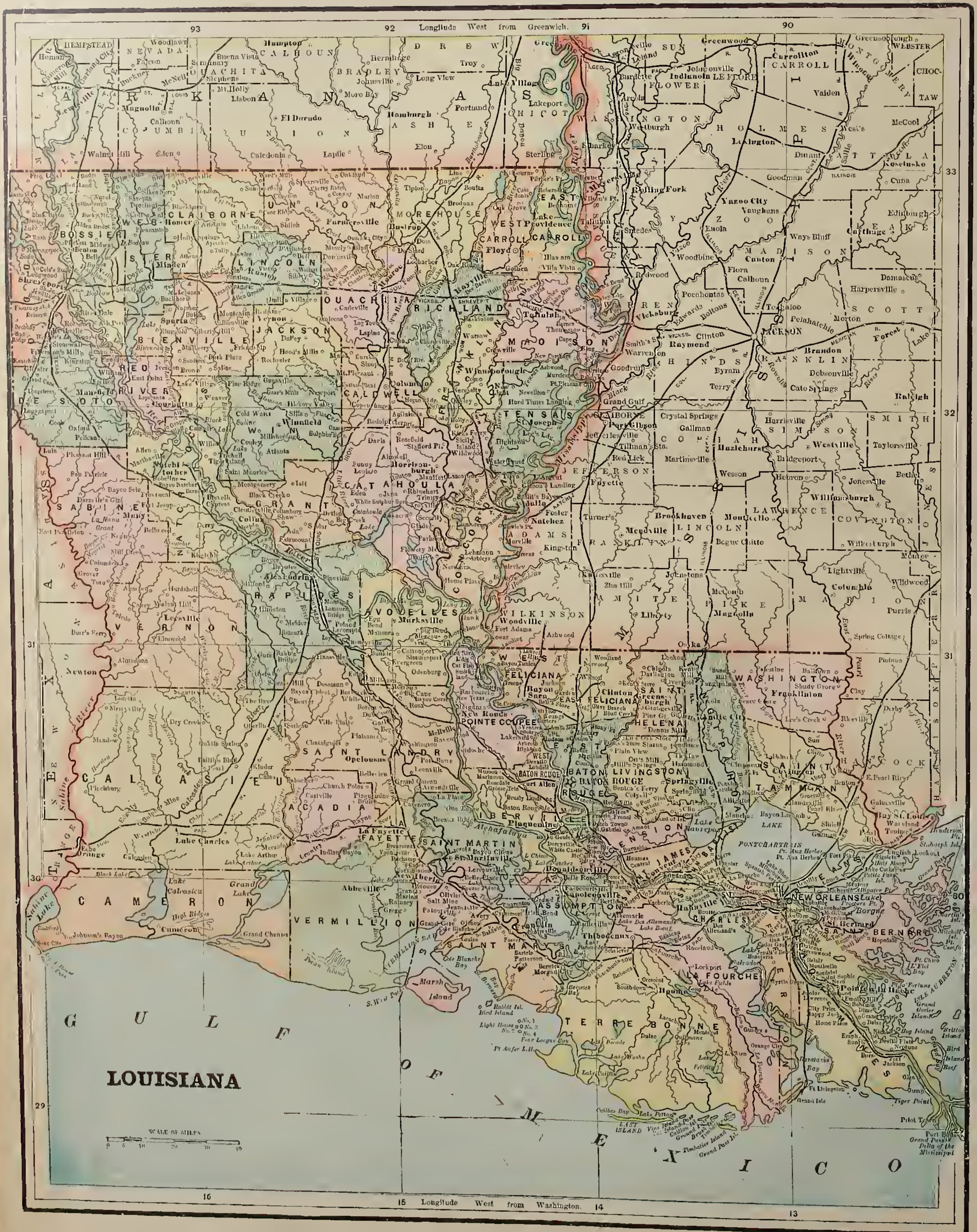
DALLAS

TEXAS

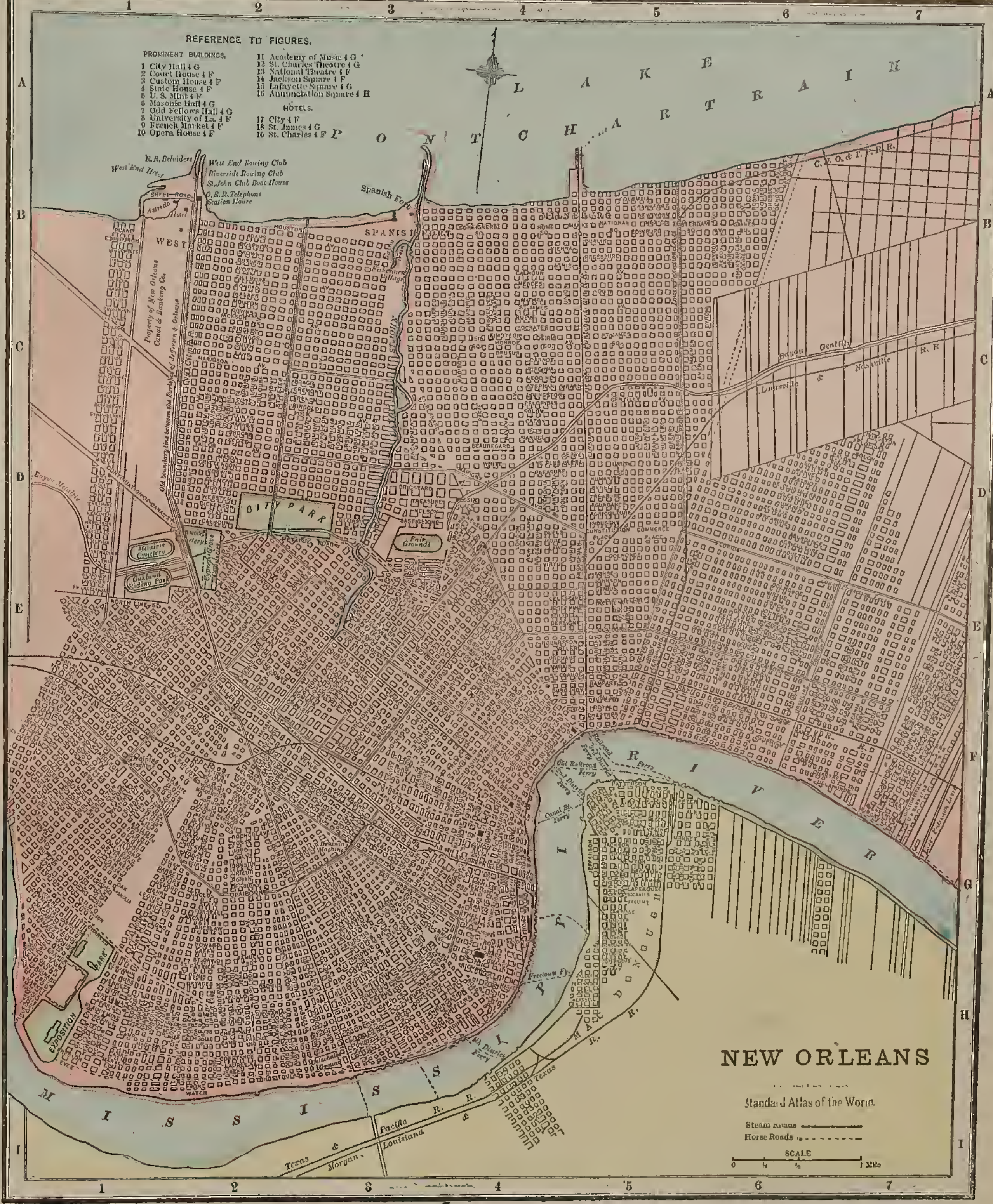
TRINITY CEMETERY
Catholic Cemetery
Cemetery
Masonic Cemetery
Graveyard
POST OFFICE
EPISCOPAL COLLEGE
URSULINE CONVENT
TEXAS & PACIFIC R.
HOUSTON & TEXAS CENTRAL R.
MISSOURI KANSAS & TEXAS R.
GULF COLORADO & SANTA FE R.
TEXAS TRUNK R.
DALLAS & OAK CLIFF ELEVATED R.
TRINITY RIVER
Turtle Creek
Dallas Branch
Elm St.
Main St.
Commerce St.
Jackson St.
Wood St.
Young St.
Ross Ave.
Live Oak St.
Swiss Ave.
Gaston Ave.
Bryan St.
Harwood St.
McKinney Ave.
Cedar Springs Road
Lamar Street
Grand Ave.
Exposition Ave.
Kentucky St.
Washington Ave.
Pocahontas Street
Akard St.
Ervay St.
Lemmon Ave.
Worth St.


Longitude West from Greenwich
100
99
98
97
96
95
94
34
33
32
31
30
SEVIER
LITTLE RIVER
MILLER
HARDEMAN
WILBARGER
WICHITA
CLAY
MONTAGUE
COOKE
GRAYSON
FANNIN
LAMAR
RED RIVER
BOWIE
FOARD
KNOX
BAYLOR
ARCHER
YOUNG
JACK
WISE
DENTON
COLLIN
HUNT
HOPKINS
FRANKLIN
TITUS
CASS
MARION
HARRISON
UPSHUR
WOOD
CAMP
RAINS
VAN ZANDT
KAUFMAN
ROCKWALL
DALLAS
TARRANT
PARKER
PALO PINTO
STEPHENS
THROCKMORTON
HASKELL
SHACKELFORD
JONES
TAYLOR
CALLAHAN
EASTLAND
ERATH
HOOD
SOMERVELL
JOHNSON
ELLIS
NAVARRO
HENDERSON
SMITH
GREGG
RUSK
PANOLA
SHELBY
SABINE
SAN AUGUSTINE
NACOGDOCHES
CHEROKEE
ANDERSON
FREESTONE
LIMESTONE
HILL
BOSQUE
HAMILTON
COMANCHE
BROWN
COLEMAN
RUNNELS
MILLS
CORYELL
McLENNAN
FALLS
ROBERTSON
LEON
HOUSTON
ANGELINA
TRINITY
POLK
TYLER
JASPER
NEWTON
HARDIN
ORANGE
SAN JACINTO
WALKER
MADISON
BRAZOS
BURLESON
MILAM
BELL
LAMPASAS
SAN SABA
McCULLOCH
CONCHO
MENARD
MASON
LLANO
BURNET
WILLIAMSON
LEE
WASHINGTON
MONTGOMERY
LIBERTY
TRAVIS
BASTROP
HAYS
BLANCO
GILLESPIE
KERR
KIMBLE
Dallas
Fort Worth
Waco
Austin
Texarkana
Sherman
Denison
Tyler
Palestine
Corsicana
Sabine
Red River
Brazos
Trinity
Colorado

EASTERN HALF
OF
TEXAS
ENGRAVED FOR
Standard Atlas of the World.
SCALE OF MILES
0 5 10 20 40 60 80
GULF OF MEXICO
Longitude West from Washington
KERR
BANDERA
KENDALL
COMAL
HAYS
BASTROP
CALDWELL
GUADALUPE
BEXAR
MEDINA
UVALDE
ZAVALLA
FRIO
ATASCOSA
WILSON
GONZALES
KARNES
DE WITT
LAVACA
FAYETTE
COLORADO
AUSTIN
WHARTON
JACKSON
MATAGORDA
BRAZORIA
FORT BEND
HARRIS
GALVESTON
CHAMBERS
JEFFERSON
LIBERTY
WALLER
VICTORIA
CALHOUN
REFUGIO
GOLIAD
BEE
LIVE OAK
SAN PATRICIO
ARANSAS
NUECES
McMULLEN
LA SALLE
DIMMIT
WEBB
ENCINAL
DUVAL
ZAPATA
STARR
HIDALGO
CAMERON
TAMAULIPAS
NUEVO LEON
MATAGORDA ISLAND
MUSTANG ISLAND
PADRE ISLAND
Corpus Christi Pass
Aransas Pass
Pass Cavallo
Houston
Galveston
San Antonio
Laredo
Brownsville
Corpus Christi
Victoria
Rio Grande



LOUISIANA
Longitude West from Greenwich.
Longitude West from Washington.
93
92
91
90
16
15
14
13
33
32
31
30
29
SCALE OF MILES
G U L F O F M E X I C O
A R K A N S A S
HEMPSTEAD
NEVADA
OUACHITA
CALHOUN
DREW
BRADLEY
COLUMBIA
UNION
ASHLEY
CHICOT
SUN FLOWER
LEFLORE
CARROLL
MONTGOMERY
WEBSTER
CHOCTAW
WASHINGTON
HOLMES
ATTALA
YAZOO
MADISON
LEAKE
SCOTT
WARREN
HINDS
RANKIN
SMITH
JEFFERSON
COPIAH
SIMPSON
LAWRENCE
COVINGTON
JONES
LINCOLN
FRANKLIN
ADAMS
AMITE
PIKE
MARION
WILKINSON
HANCOCK
HARRISON
JACKSON
PERRY
CLAIBORNE
BOSSIER
WEBSTER
LINCOLN
UNION
MOREHOUSE
WEST CARROLL
EAST CARROLL
OUACHITA
RICHLAND
MADISON
BIENVILLE
JACKSON
CALDWELL
FRANKLIN
TENSAS
DE SOTO
RED RIVER
WINN
CATAHOULA
CONCORDIA
SABINE
NATCHITOCHES
GRANT
RAPIDES
AVOYELLES
VERNON
WEST FELICIANA
EAST FELICIANA
SAINT HELENA
TANGIPAHOA
WASHINGTON
SAINT TAMMANY
POINTE COUPEE
SAINT LANDRY
CALCASIEU
ACADIA
LA FAYETTE
SAINT MARTIN
IBERVILLE
EAST BATON ROUGE
WEST BATON ROUGE
LIVINGSTON
ASCENSION
SAINT JAMES
SAINT JOHN BAPTIST
SAINT CHARLES
JEFFERSON
ORLEANS
SAINT BERNARD
PLAQUEMINES
IBERIA
SAINT MARY
ASSUMPTION
LA FOURCHE
TERRE BONNE
VERMILLION
CAMERON
Shreveport
Minden
Homer
Ruston
Monroe
Bastrop
Farmerville
Floyd
Lake Providence
Delhi
Rayville
Tallulah
Vicksburg
Jackson
Natchez
Vidalia
Winnfield
Columbia
Harrisonburg
Natchitoches
Many
Mansfield
Colfax
Alexandria
Marksville
Leesville
Opelousas
Lake Charles
La Fayette
Abbeville
New Iberia
St. Martinville
Franklin
Plaquemine
Baton Rouge
Clinton
Greensburg
Springfield
Covington
Franklinton
Donaldsonville
Napoleonville
Thibodeaux
Houma
Convent
Hahnville
Gretna
NEW ORLEANS
Pointe à la Hache
Cameron
Lake Pontchartrain
Lake Maurepas
Lake Borgne
Grand Lake
Lake Calcasieu
Sabine Lake
Marsh Island
Barataria Bay
Timbalier Island
Last Island
Grand Isle
Chandeleur Islands
Isle au Breton
Port Eads
Delta of the Mississippi
Mississippi River
Red River
Sabine River
Pearl River
Atchafalaya
Calcasieu


NEW ORLEANS
Standard Atlas of the World
REFERENCE TO FIGURES.
PROMINENT BUILDINGS.
1 City Hall 4 G
2 Court House 4 F
3 Custom House 4 F
4 State House 4 F
5 U. S. Mint 4 F
6 Masonic Hall 4 G
7 Odd Fellows Hall 4 G
8 University of La. 4 F
9 French Market 4 F
10 Opera House 4 F
11 Academy of Music 4 G
12 St. Charles Theatre 4 G
13 National Theatre 4 F
14 Jackson Square 4 F
15 Lafayette Square 4 G
16 Annunciation Square 4 H
HOTELS.
17 City 4 F
18 St. James 4 G
19 St. Charles 4 F
LAKE PONTCHARTRAIN
R. R. Belvidere
West End Hotel
West End Rowing Club
Riverside Rowing Club
St. John Club Boat House
O. R. R. Telephone Station House
Spanish Fort
SPANISH FORT
Fishermen's Village
WEST END
Property of New Orleans Canal & Banking Co.
Old boundary line between the Parishes of Jefferson & Orleans
Bayou Metairie
CITY PARK
Fair Grounds
Metairie Cemetery
Oakland Riding Park
Cypress Grove Cemetery
Bayou Gentilly
Louisville & Nashville R. R.
C. N. O. & T. P. R. R.
RIVER
MISSISSIPPI
Canal St. Ferry
Old Railroad Ferry
Freetown Fy.
4th District Ferry
Texas & Pacific R. R.
Morgan's Louisiana & Texas R. R.
EXPOSITION
PARK
Steam Roads
Horse Roads
SCALE
0
¼
½
1 Mile
1
2
3
4
5
6
7
A
B
C
D
E
F
G
H
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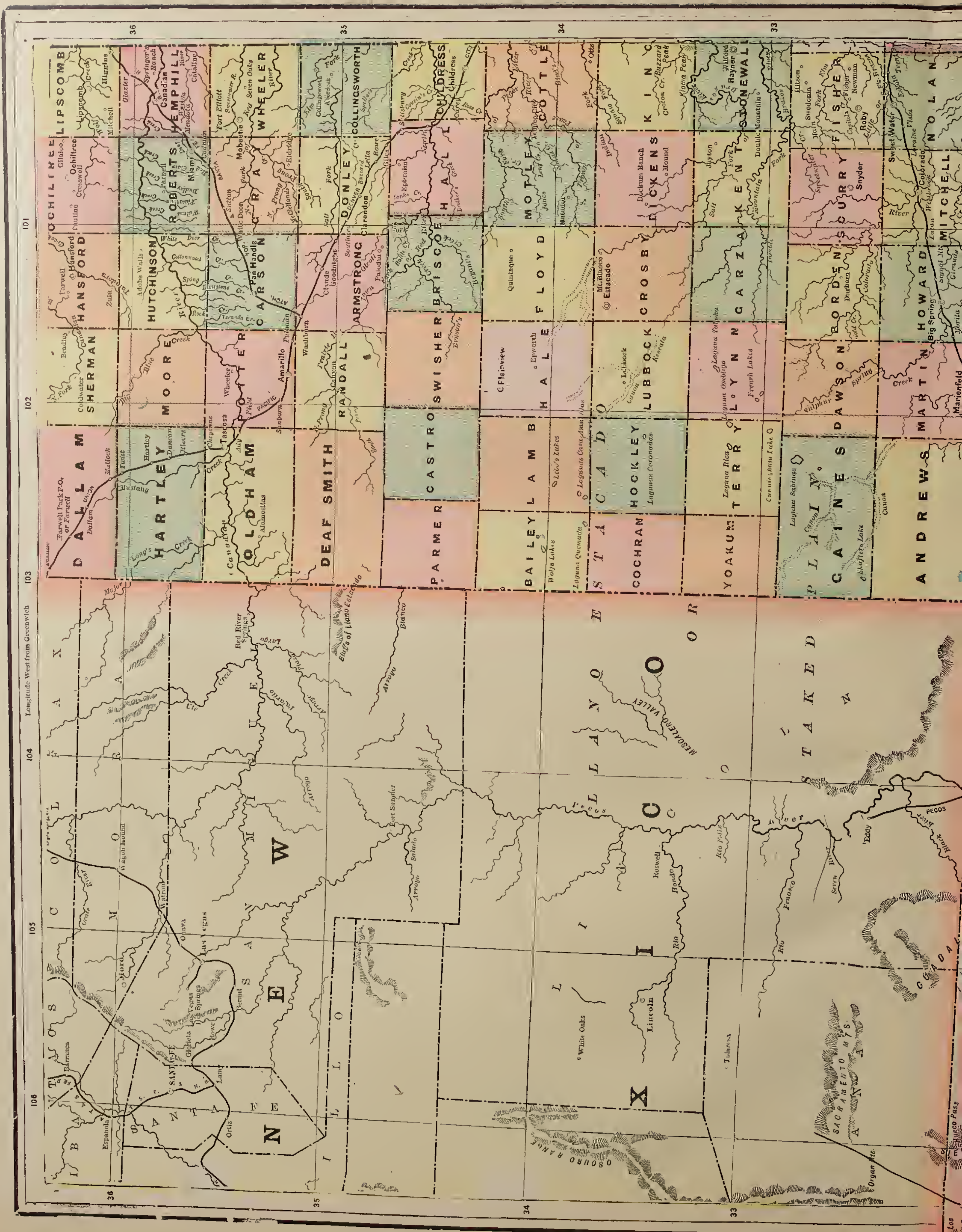
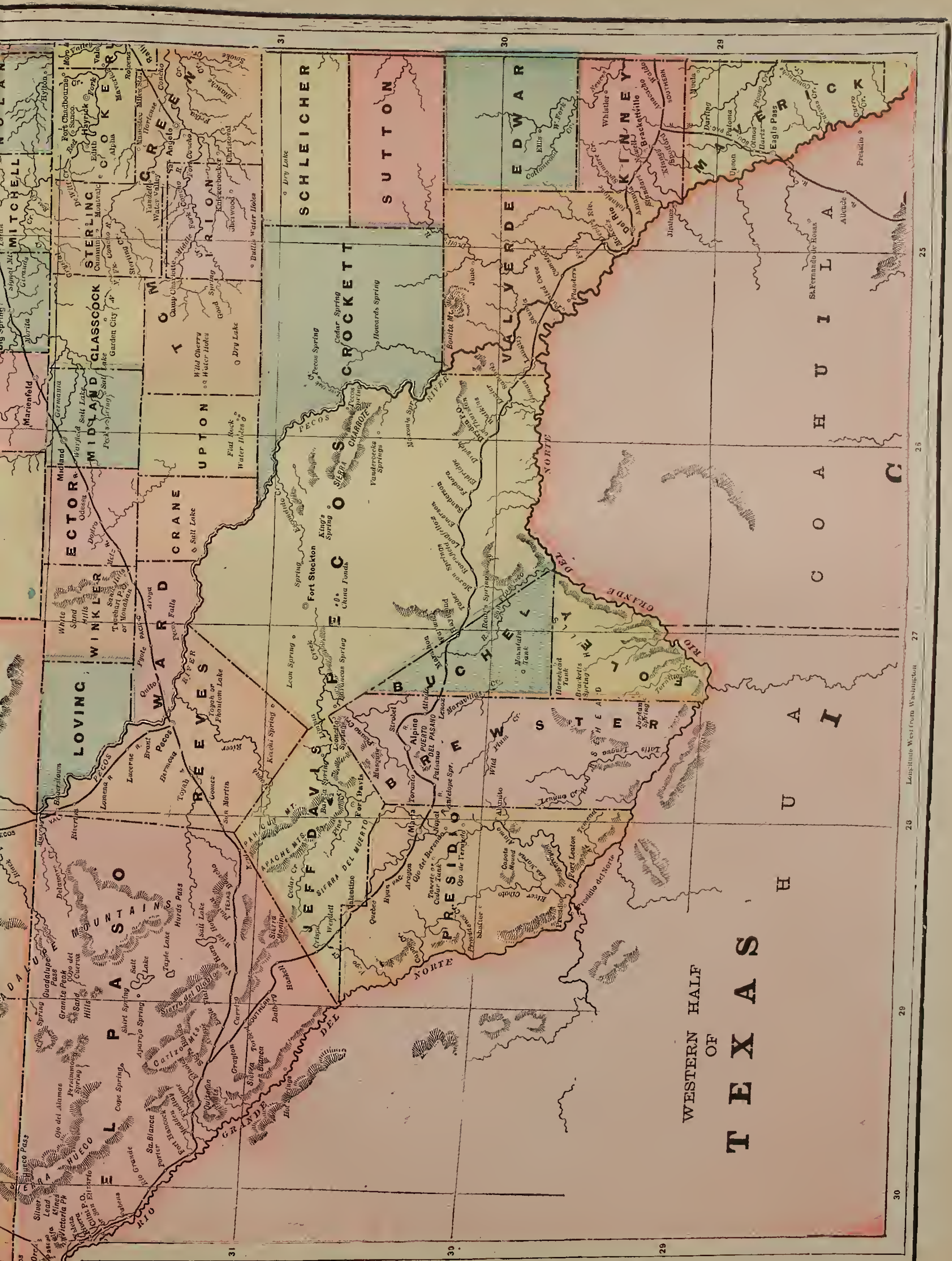
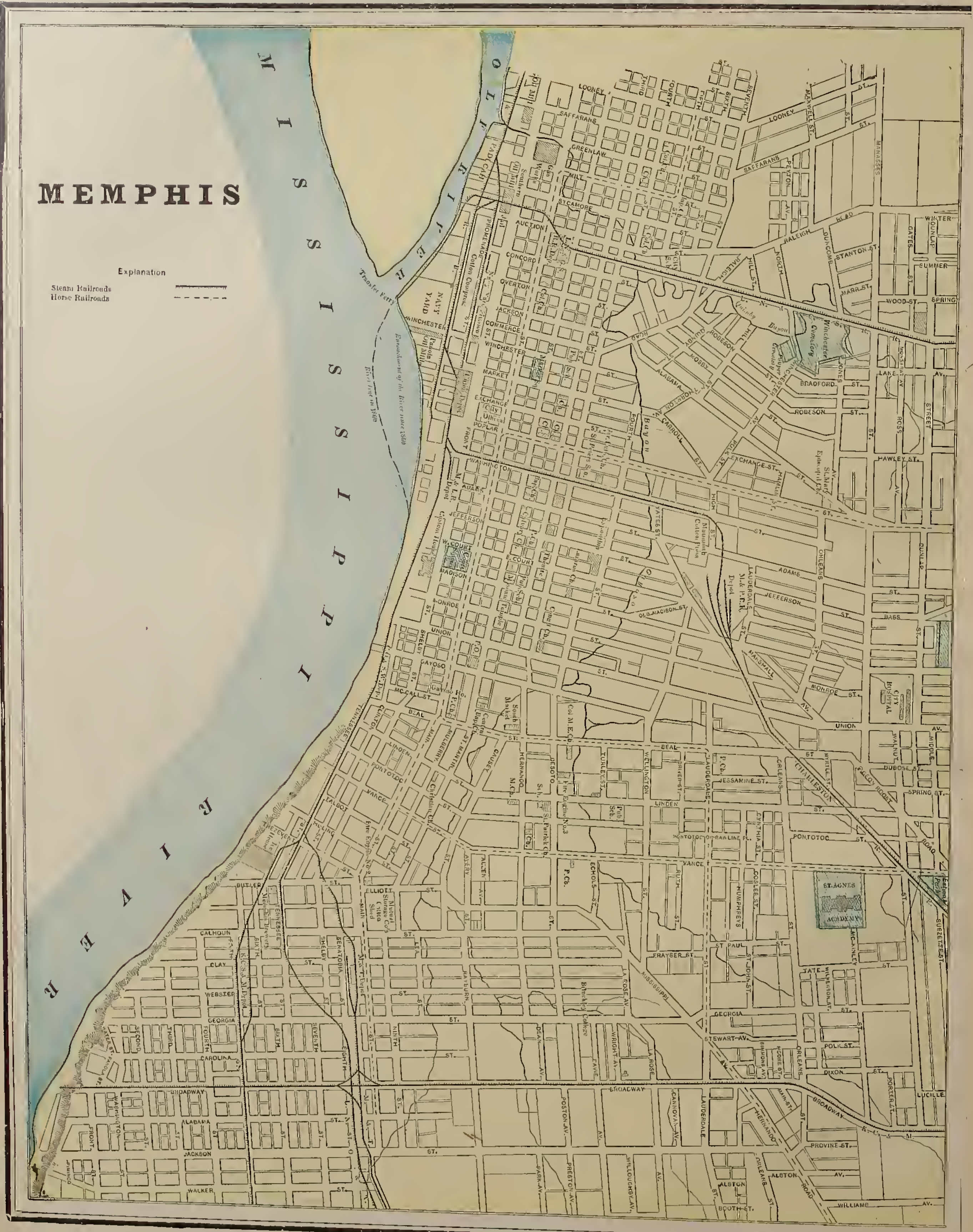
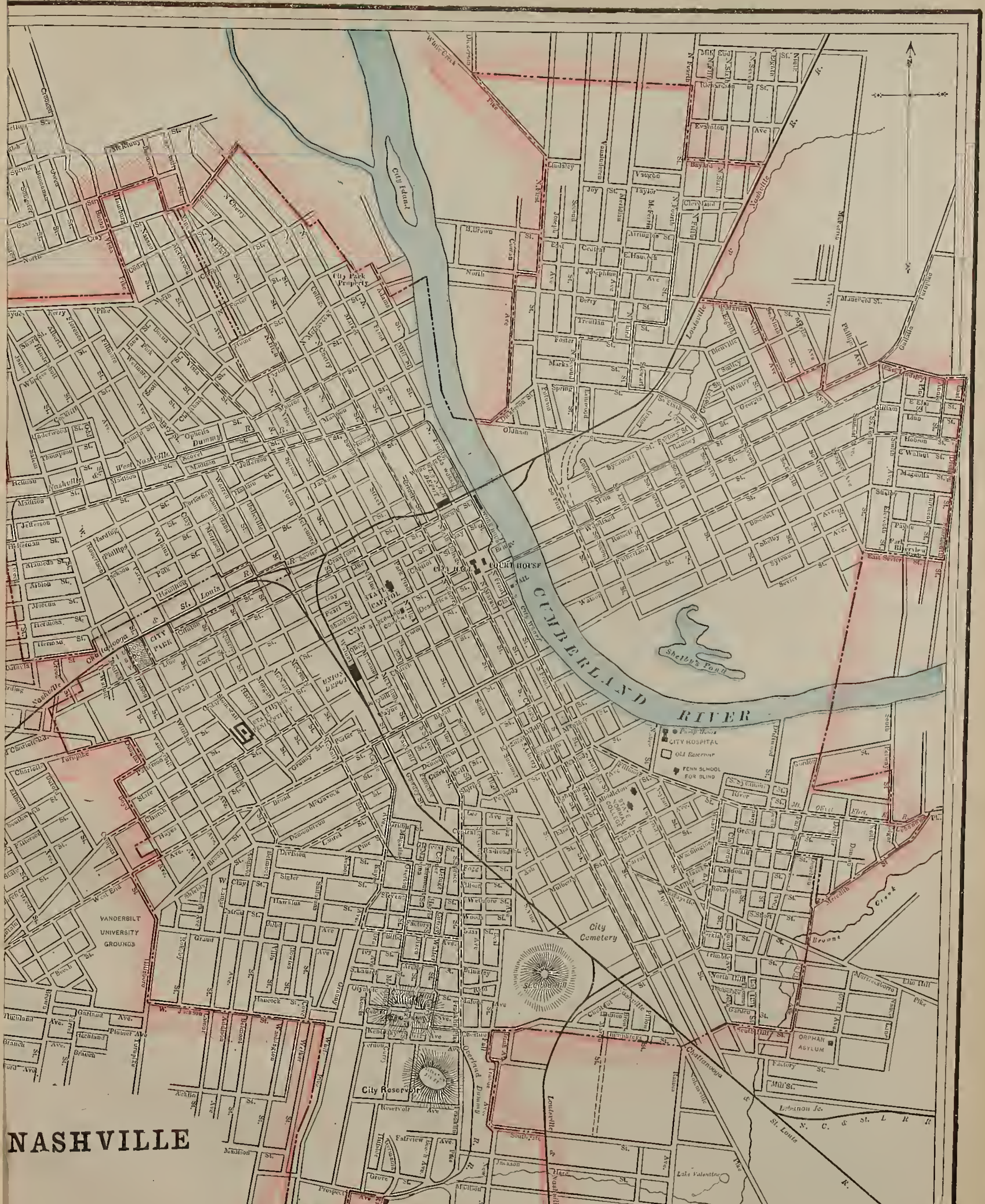

Longitude West from Greenwich
101
102
103
104
105
106
36
35
34
33
LIPSCOMB
OCHILTREE
HANSFORD
SHERMAN
DALLAM
HEMPHILL
ROBERTS
HUTCHINSON
MOORE
HARTLEY
WHEELER
GRAY
CARSON
POTTER
OLDHAM
COLLINGSWORTH
DONLEY
ARMSTRONG
RANDALL
DEAF SMITH
CHILDRESS
HALL
BRISCOE
SWISHER
CASTRO
PARMER
COTTLE
MOTLEY
FLOYD
HALE
LAMB
BAILEY
KING
DICKENS
CROSBY
LUBBOCK
HOCKLEY
COCHRAN
STONEWALL
KENT
GARZA
LYNN
TERRY
YOAKUM
FISHER
SCURRY
BORDEN
DAWSON
GAINES
NOLAN
MITCHELL
HOWARD
MARTIN
ANDREWS
COLFAX
MORA
SAN MIGUEL
SANTA FE
NEW MEXICO
LLANO ESTACADO OR STAKED PLAIN
MESCALERO VALLEY
SACRAMENTO MTS.
OSCURO RANGE
GUADALUPE
Amarillo
Tascosa
Clarendon
Mobeetie
Childress
Lubbock
Big Spring
Colorado
Snyder
Santa Fe
Las Vegas
Fort Sumner
Roswell
Lincoln
White Oaks
Eddy
Pecos River


WESTERN HALF OF TEXAS
EL PASO
LOVING
WINKLER
ECTOR
MIDLAND
GLASSCOCK
STERLING
COKE
MITCHELL
TOM GREEN
IRION
UPTON
CRANE
WARD
REEVES
PECOS
CROCKETT
SCHLEICHER
SUTTON
EDWARDS
KINNEY
MAVERICK
VAL VERDE
BUCHEL
FOLEY
BREWSTER
PRESIDIO
JEFF DAVIS
COAHUILA
CHIHUAHUA
RIO GRANDE DEL NORTE
PECOS RIVER
Fort Stockton
Fort Davis
Del Rio
Eagle Pass
Longitude West from Washington

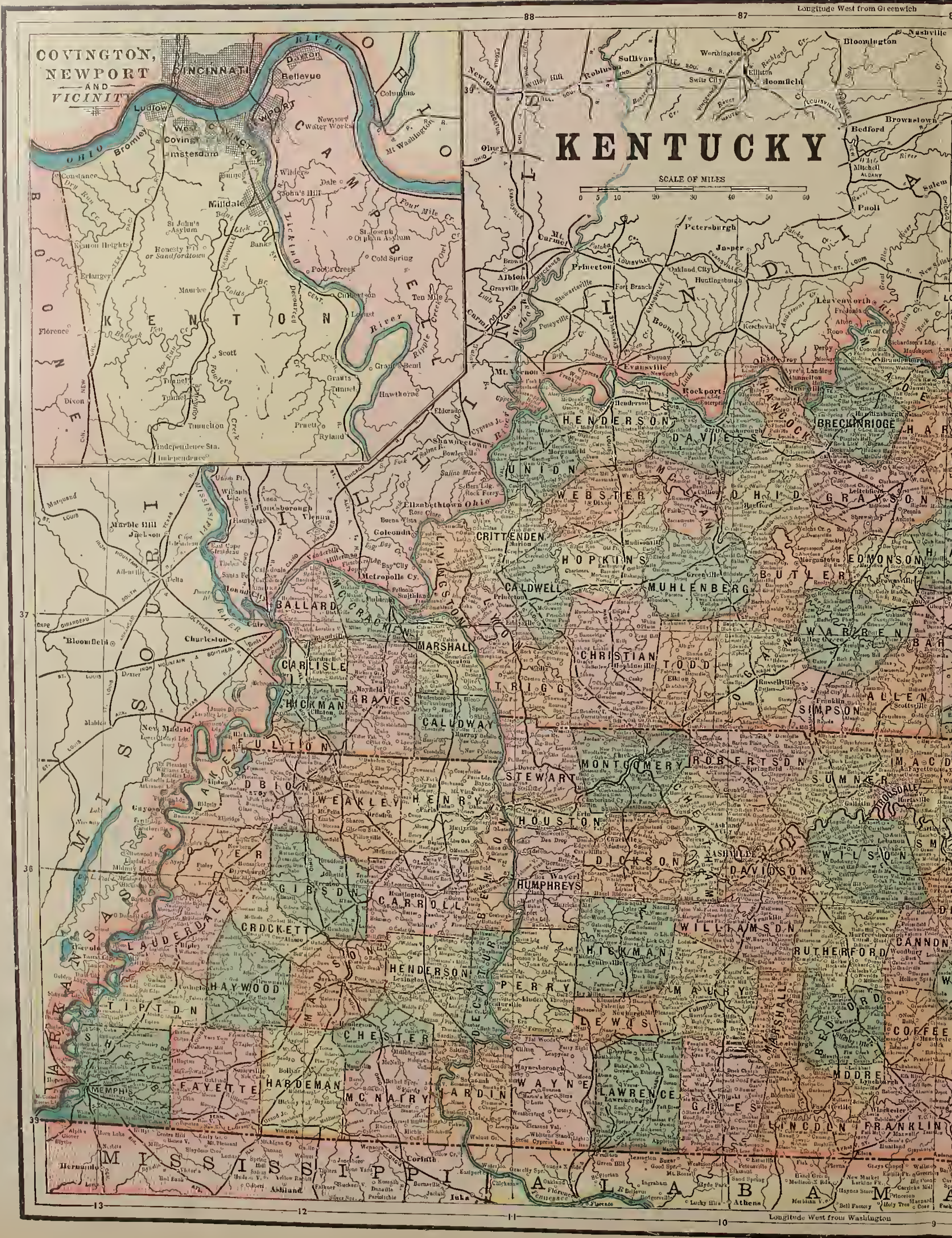
MEMPHIS

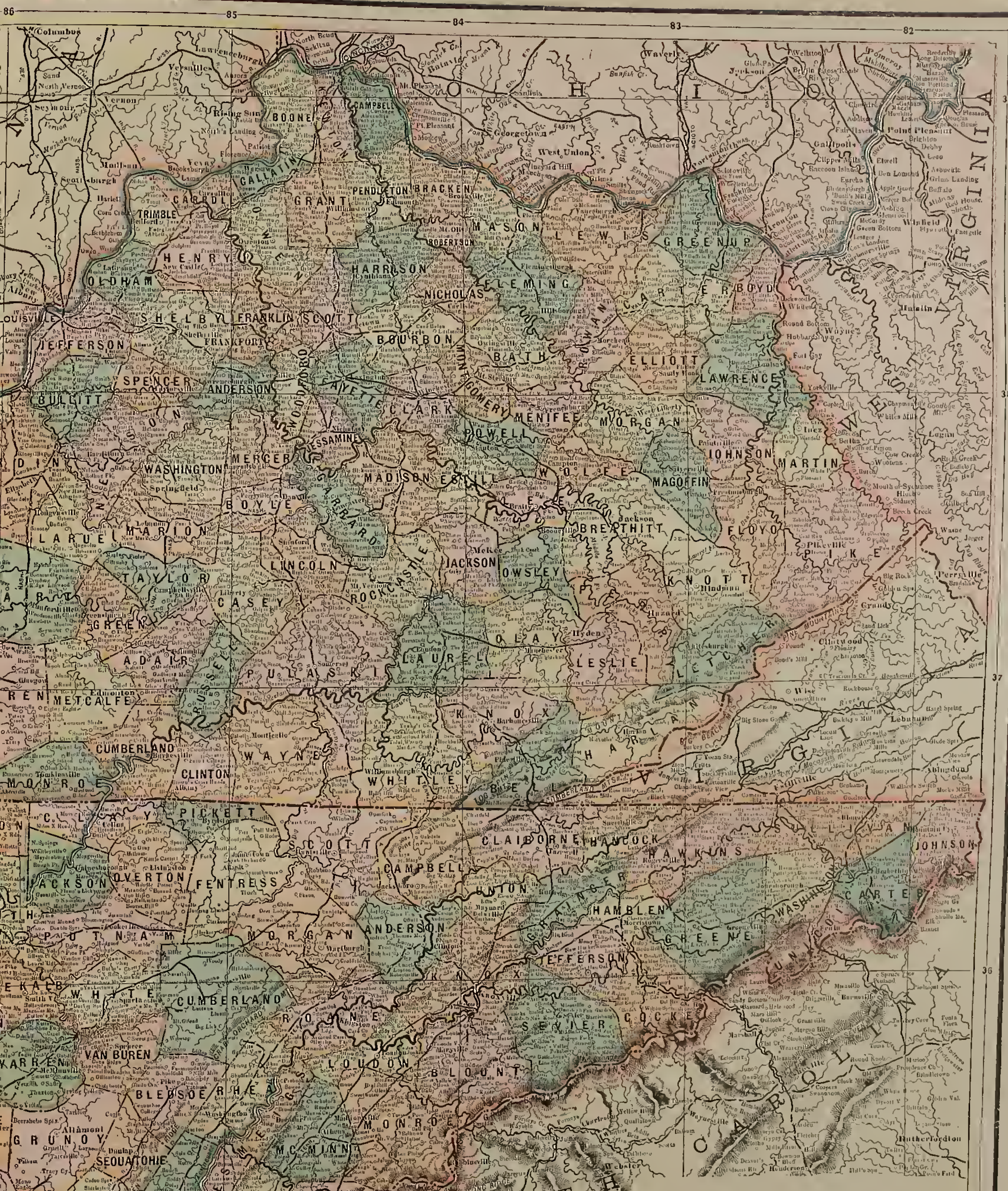

Explanation
Steam Railroads
Horse Railroads
MISSISSIPPI RIVER
WOLF RIVER
Transfer Ferry
Encroachment of the River since 1860
River line in 1860
NAVY YARD
Cotton Compress
PROMENADE
FRONT
WINCHESTER
COMMERCE ST.
JACKSON
OVERTON
CONCORD
AUCTION
SYCAMORE
MILL
GREENLAW
SAFFARANS
LOONEY
MAXWELL ST.
MANASSAS
RALEIGH
MILL ST.
NORTH
DUNCOMBE
STANTON ST.
WINTER
DUNLAP
GATES
SUMMER
MARR ST.
WOOD ST.
SPRING
Gayoso Bayou
Winchester Cemetery
ROBESON
BRADFORD
LANE
AV.
ALABAMA
CARROLL
EXCHANGE ST.
HAWLEY ST.
MARKET
EXCHANGE
POPLAR
City Offices
WASHINGTON
ADAMS
JEFFERSON
M. & L.R. Depot
W. COURT
E. COURT
MADISON
MONROE
UNION
SHELBY
GAYOSO
MC CALL ST.
BEAL
MAIN
TENNESSEE
CLINTON
LINDEN
PONTOTOC
VANCE
TALBOT
MULBERRY
ST. MARTIN
CAUSEY
HERNANDO
DESOTO
TURLEY ST.
WELLINGTON
LAUDERDALE
ORLEANS
YATES ST.
Mammoth Cotton Press
M. & C. R.R. Depot
OLD MADISON ST.
MARSHALL
MONROE ST.
CITY HOSPITAL
UNION
BASS
WALNUT
MIDDLE
DUBOSE ST.
SPRING ST.
CHARLESTON
PIGEON ROOST ROAD
JESSAMINE ST.
CYNTHIA ST.
PONTOTOC
ST. AGNES ACADEMY
South Market
Central Baptist Ch.
St. Patrick Ch.
Fire Engine No. 3
Pub. Sch.
ECHOLS
ALLEN AV.
ELLIOTT
Mutual Storage Co's Cotton Shed
BUTLER
CALHOUN
CLAY
WEBSTER
GEORGIA
CAROLINA
SECOND
THIRD
FOURTH
SIXTH
SEVENTH
EIGHTH
NINTH
SHELBY
SENATOBIA
K.C.S. & M. Depot
Memphis Brewery
NATHURN
LA ROSE AV.
Brinkley College
DEAN AV.
TATE AV.
WRIGHT AV.
LA ROSE
MISSISSIPPI
FRAYSER ST.
ST. PAUL
ST. JOHN ST.
HUMPHREYS
COSSITT ST.
TATE
WICKERSON ST.
McKINLEY
GEORGIA
STEWART AV.
POLK ST.
DIXON
PORTER ST.
LUCILLE
BROADWAY
ALABAMA
FRONT
JACKSON
WALKER
POSTON AV.
CANOVA AV.
LAUDERDALE
HERNANDO
PARK AV.
PRESTON AV.
WILLOUGHBY AV.
ORLEANS
ALSTON
ALSTON ROAD
BOOTH ST.
PROVINE ST.
WILLIAMS AV.
SUZETTE ST.



NASHVILLE

CUMBERLAND RIVER
City Island
Shelby's Pond
City Park Property
STATE CAPITOL
COURT HOUSE
CITY HALL
JAIL
UNION DEPOT
CITY PARK
Pest House
CITY HOSPITAL
Old Reservoir
PENN SCHOOL FOR BLIND
VANDERBILT UNIVERSITY GROUNDS
City Cemetery
St. Cloud Hill
City Reservoir
ORPHAN ASYLUM
Lake Valentine
Browns Creek
Nashville R. R.
Louisville & Nashville R.
Chattanooga
N. C. & St. L. R. R.
St. Louis R. R.
Lebanon Jc.
Murfreesboro Pike
Lebanon Pike
Gallatin Turnpike
White Creek Pike
Charlotte Turnpike
West End
Hillsboro Turnpike
Granny White Pike
Nolensville Pike
Broad
Church
Spring
Main
Woodland


KENTUCKY
SCALE OF MILES
0 5 10 20 30 40 50 60
COVINGTON, NEWPORT AND VICINITY
Longitude West from Greenwich
Longitude West from Washington
88
87
39
37
36
35
13
12
11
10
9
INDIANA
ILLINOIS
MISSOURI
ARKANSAS
MISSISSIPPI
ALABAMA
KENTON
CAMPBELL
BOONE
HENDERSON
DAVIESS
BRECKINRIDGE
UNION
WEBSTER
CRITTENDEN
HOPKINS
CALDWELL
MUHLENBERG
BUTLER
EDMONSON
GRAYSON
BALLARD
McCRACKEN
MARSHALL
CARLISLE
HICKMAN
GRAVES
CALLOWAY
FULTON
CHRISTIAN
TODD
TRIGG
WARREN
SIMPSON
ALLEN
OBION
WEAKLEY
HENRY
STEWART
MONTGOMERY
ROBERTSON
SUMNER
HOUSTON
DICKSON
DAVIDSON
WILSON
HUMPHREYS
DYER
LAKE
GIBSON
CARROLL
CROCKETT
LAUDERDALE
HAYWOOD
TIPTON
SHELBY
FAYETTE
HARDEMAN
McNAIRY
CHESTER
HENDERSON
MADISON
DECATUR
PERRY
HICKMAN
WILLIAMSON
RUTHERFORD
MAURY
LEWIS
WAYNE
HARDIN
LAWRENCE
GILES
MARSHALL
BEDFORD
COFFEE
MOORE
LINCOLN
FRANKLIN
CANNON
TROUSDALE
MACON
Cincinnati
Covington
Newport
Evansville
Nashville
Memphis
Cairo
Paducah
Henderson
Owensboro
Hopkinsville
Clarksville
Bowling Green
Jackson
Murfreesboro
Columbia


TENNESSEE
OHIO
WEST VIRGINIA
VIRGINIA
NORTH CAROLINA
SOUTH CAROLINA
GEORGIA
BOONE
CAMPBELL
GALLATIN
CARROLL
TRIMBLE
GRANT
PENDLETON
BRACKEN
MASON
LEWIS
GREENUP
BOYD
HENRY
OLDHAM
OWEN
HARRISON
ROBERTSON
FLEMING
NICHOLAS
CARTER
LOUISVILLE
JEFFERSON
SHELBY
FRANKLIN
SCOTT
BOURBON
BATH
ROWAN
ELLIOTT
LAWRENCE
SPENCER
ANDERSON
WOODFORD
FAYETTE
CLARK
MONTGOMERY
MENIFEE
MORGAN
BULLITT
NELSON
WASHINGTON
MERCER
JESSAMINE
POWELL
WOLFE
JOHNSON
MARTIN
MADISON
ESTILL
MAGOFFIN
BOYLE
GARRARD
LEE
BREATHITT
FLOYD
PIKE
LARUE
MARION
LINCOLN
JACKSON
OWSLEY
KNOTT
TAYLOR
CASEY
ROCKCASTLE
GREEN
CLAY
PERRY
LETCHER
ADAIR
RUSSELL
PULASKI
LAUREL
LESLIE
METCALFE
KNOX
HARLAN
CUMBERLAND
WAYNE
CLINTON
WHITLEY
BELL
MONROE
CLAY
PICKETT
SCOTT
CLAIBORNE
HANCOCK
HAWKINS
SULLIVAN
JOHNSON
CAMPBELL
UNION
GRAINGER
OVERTON
FENTRESS
JACKSON
CARTER
HAMBLEN
WASHINGTON
ANDERSON
PUTNAM
MORGAN
GREENE
JEFFERSON
UNICOI
KNOX
DEKALB
WHITE
CUMBERLAND
ROANE
SEVIER
COCKE
VAN BUREN
WARREN
LOUDON
BLOUNT
BLEDSOE
RHEA
MEIGS
MONROE
GRUNDY
SEQUATCHIE
McMINN
HAMILTON
BRADLEY
POLK
MARION
CUMBERLAND MTS.
86
85
84
83
82
39
38
37
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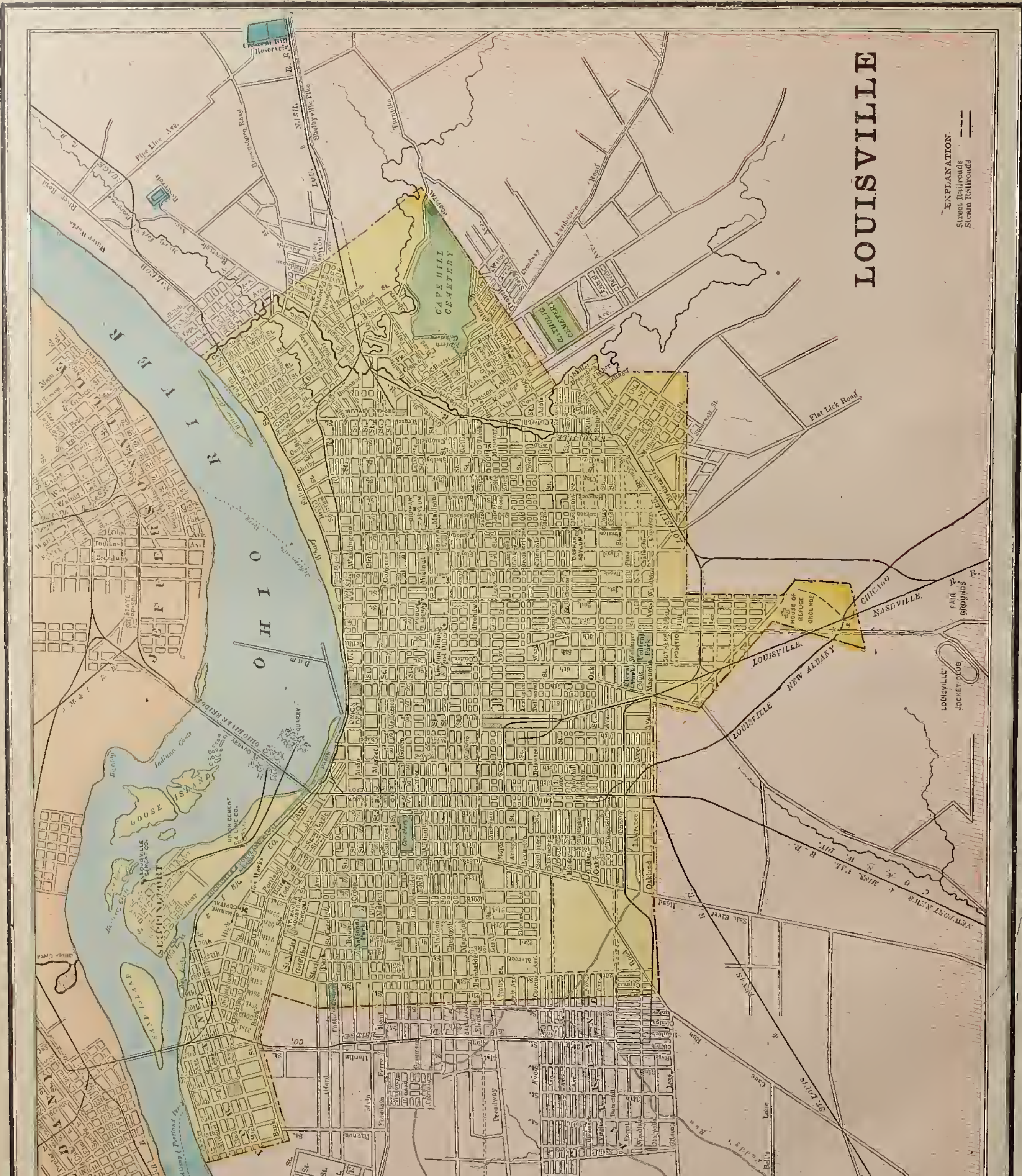
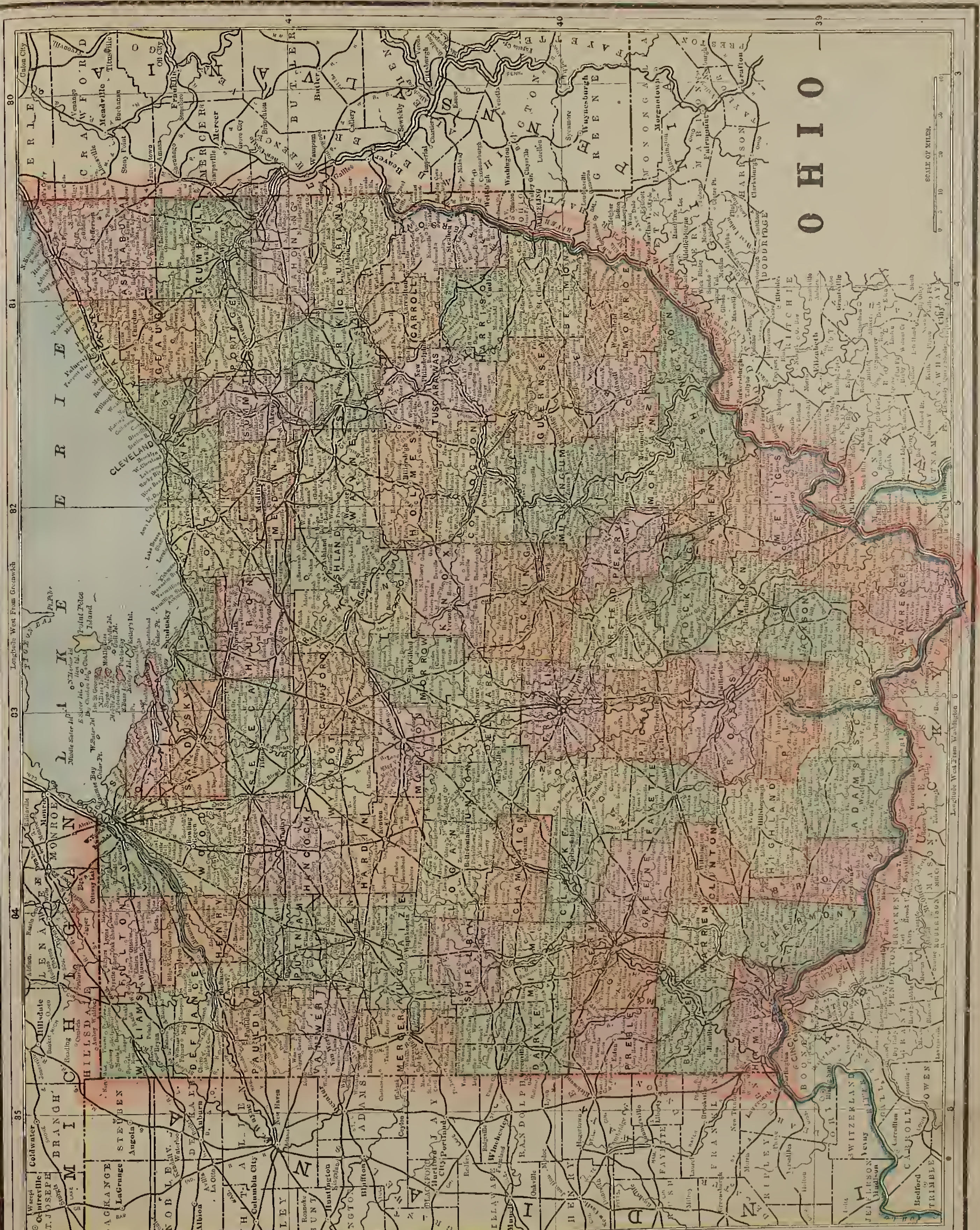
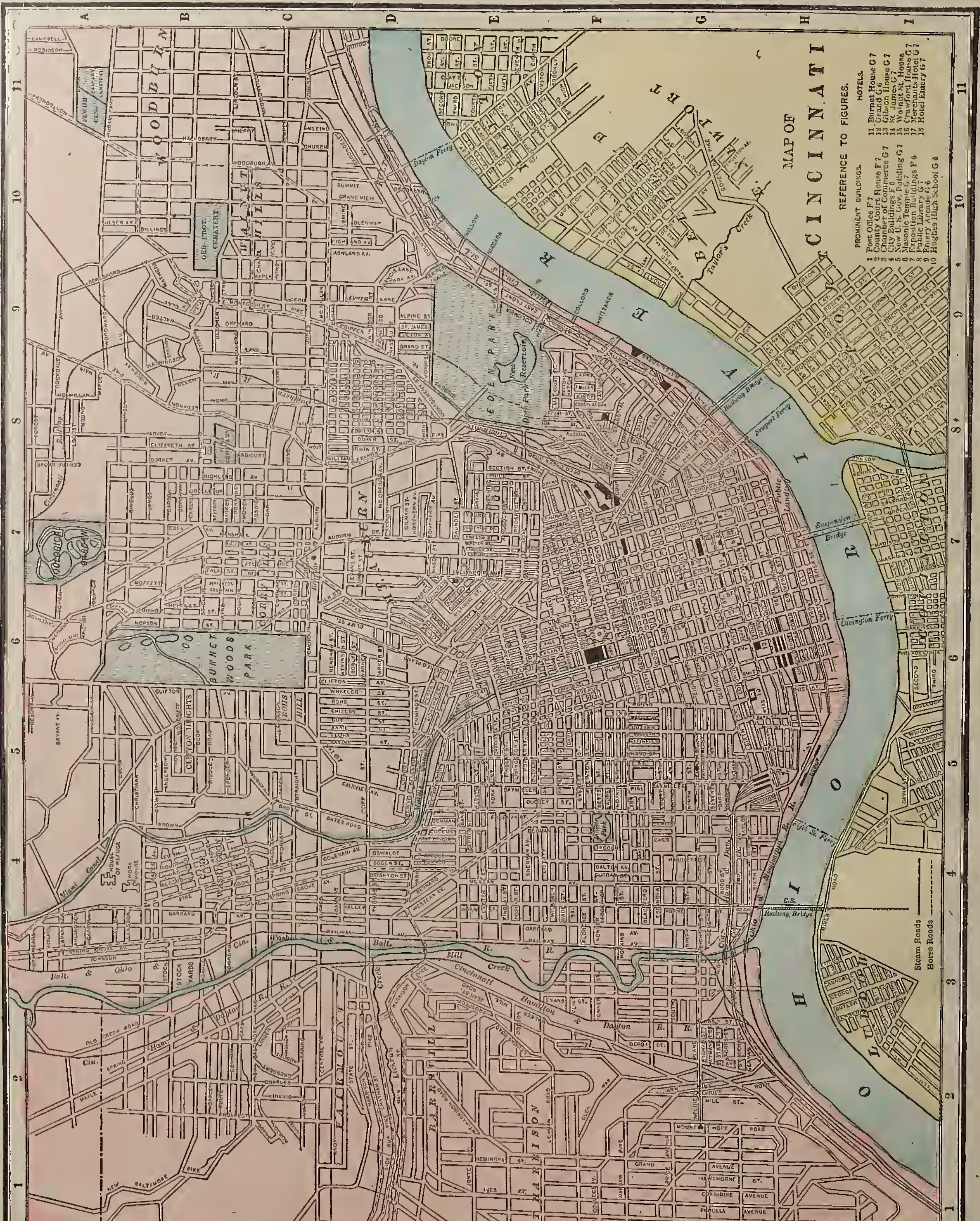
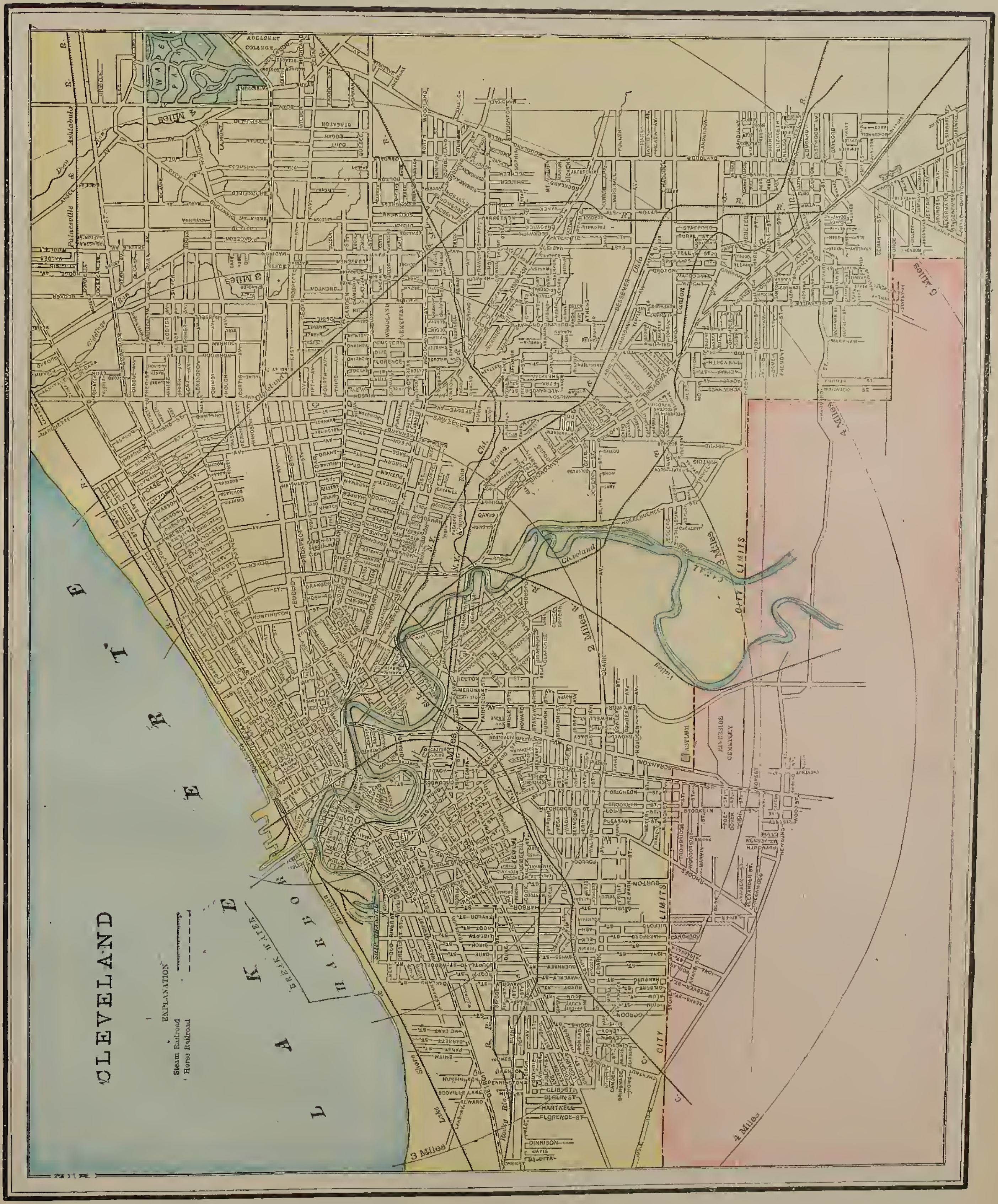
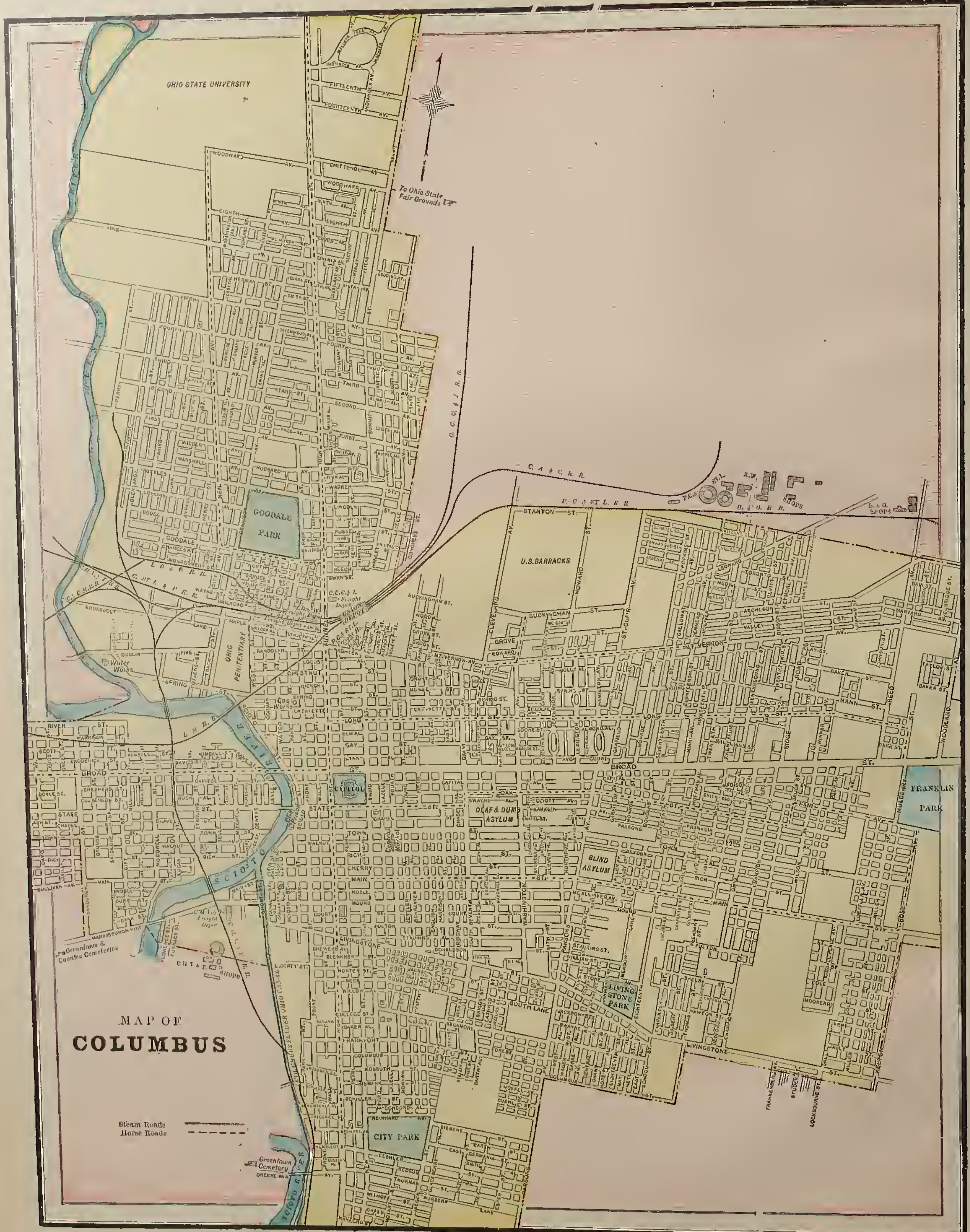
35
8
7
6
5

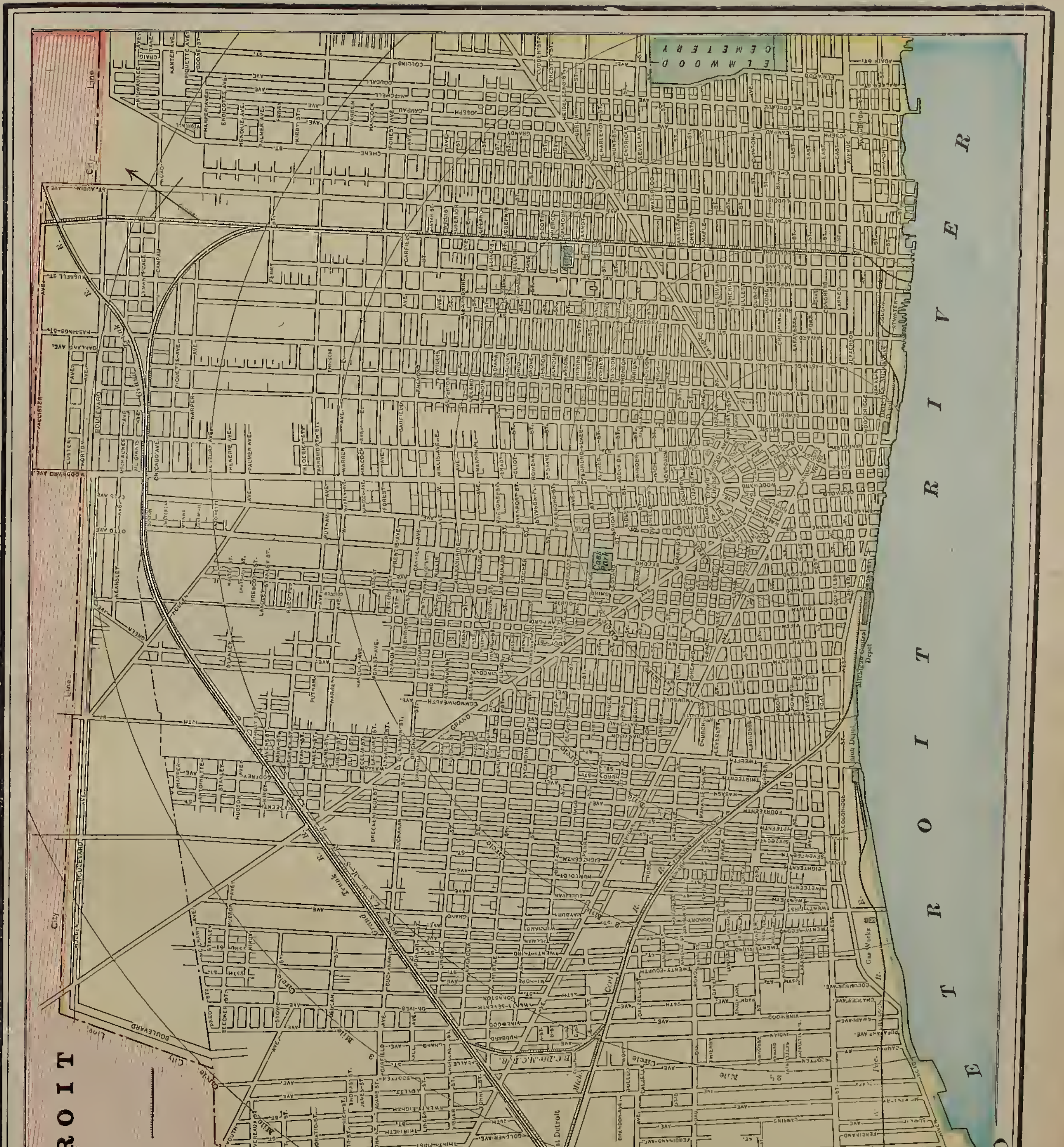

LOUISVILLE
EXPLANATION.
Street Railroads
Steam Railroads
OHIO RIVER
JEFFERSONVILLE
NEW ALBANY
GOOSE ISLAND
SAND ISLAND
SHIPPINGPORT
WEST LOUISVILLE
CAVE HILL CEMETERY
CATHOLIC CEMETERY
Crescent Hill Reservoir
Reservoir
HOUSE OF REFUGE GROUNDS
FAIR GROUNDS
LOUISVILLE JOCKEY CLUB
LOUISVILLE CEMENT CO.
UNION CEMENT & LIME CO.
OHIO RIVER BRIDGE
Dam
Indiana Chute
STATE PRISON
LOUISVILLE NEW ALBANY & CHICAGO R.R.
NASHVILLE
CHESAPEAKE, OHIO & SOUTHWESTERN R.R.
NEWPORT NEWS & MISS. VAL. R.R.
LOUISVILLE & ST. LOUIS AIR LINE
Flat Lick Road
Shelbyville Pike
Bardstown Road
Salt River Road
Preston St.
Broadway
Upper Paddy's Run
Lower Paddy's Run

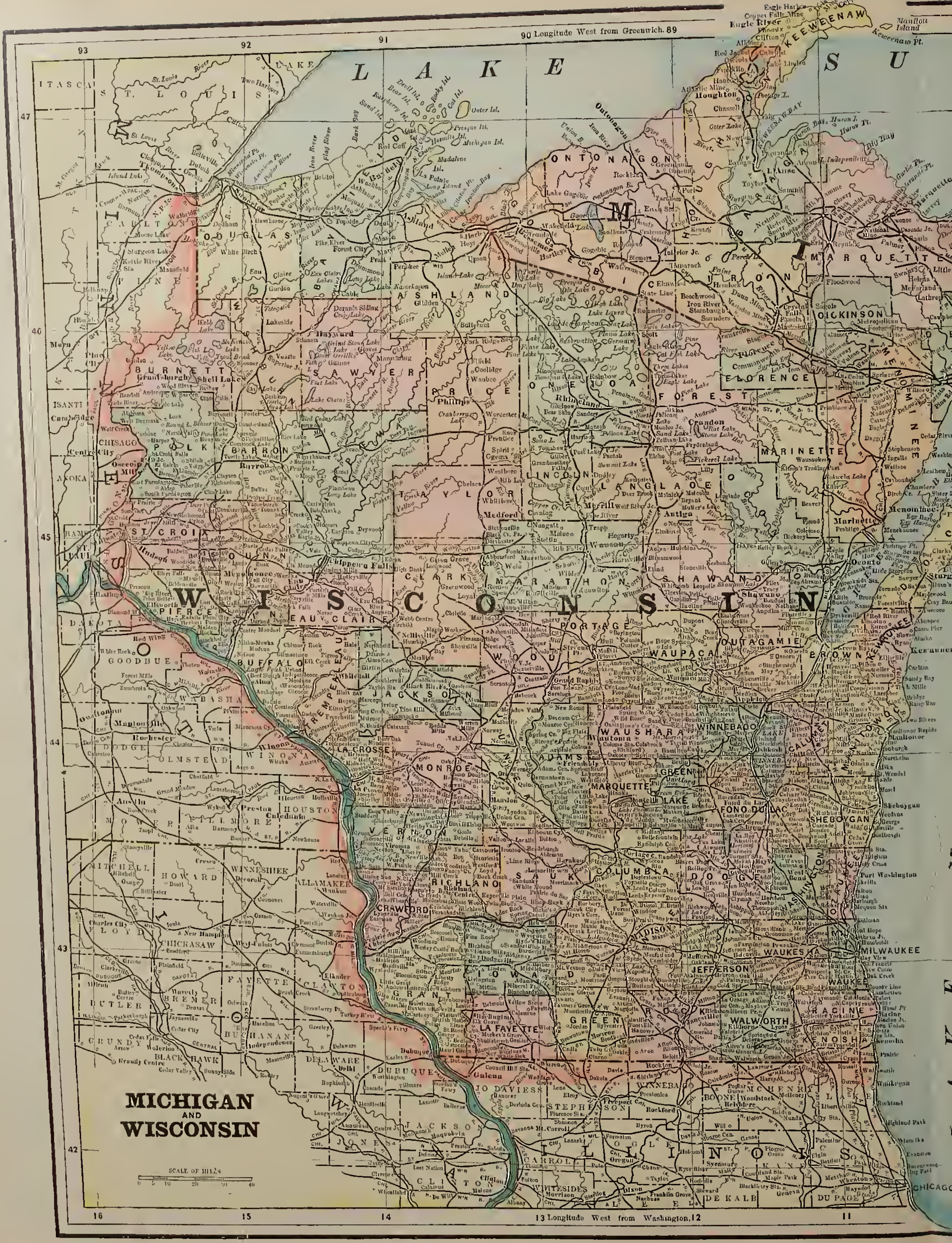

OHIO
LAKE ERIE
CLEVELAND
Point Pelee Island
SCALE OF MILES
Longitude West From Greenwich
Longitude West From Washington


MAP OF
CINCINNATI
REFERENCE TO FIGURES.
PROMINENT BUILDINGS.
1 Post Office F 7
2 County Court House F 7
3 Chamber of Commerce G 7
4 City Buildings F 6
5 New U. S. Gov. Building G 7
6 Masonic Temple G 7
7 Exposition Buildings F 6
8 Public Library G 7
9 Emery Arcade G 6
10 Hughes High School G 6
HOTELS.
11 Burnet House G 7
12 Grand G 6
13 Gibson House G 7
14 St. James G 7
15 Walnut St. House
16 Crawford House G 7
17 Merchants Hotel G 7
18 Hotel Emery G 7
Steam Roads
Horse Roads
OHIO RIVER
NEWPORT
COVINGTON
LUDLOW
WALNUT HILLS
AVONDALE
CLIFTON HEIGHTS
BURNET WOODS PARK
EDEN PARK
New Reservoir
Mill Creek
Miami Canal
Public Landing
Suspension Bridge
Railway Bridge
Newport Ferry
Covington Ferry
Taylor's Creek
Licking River


CLEVELAND
EXPLANATION
Steam Railroad
Horse Railroad
LAKE ERIE
BREAK WATER
HARBOR
WADE PARK
ADELBERT COLLEGE
RIVERSIDE CEMETERY
ASYLUM
CITY LIMITS
Cleveland
1 Miles
2 Miles
3 Miles
4 Miles
5 Miles

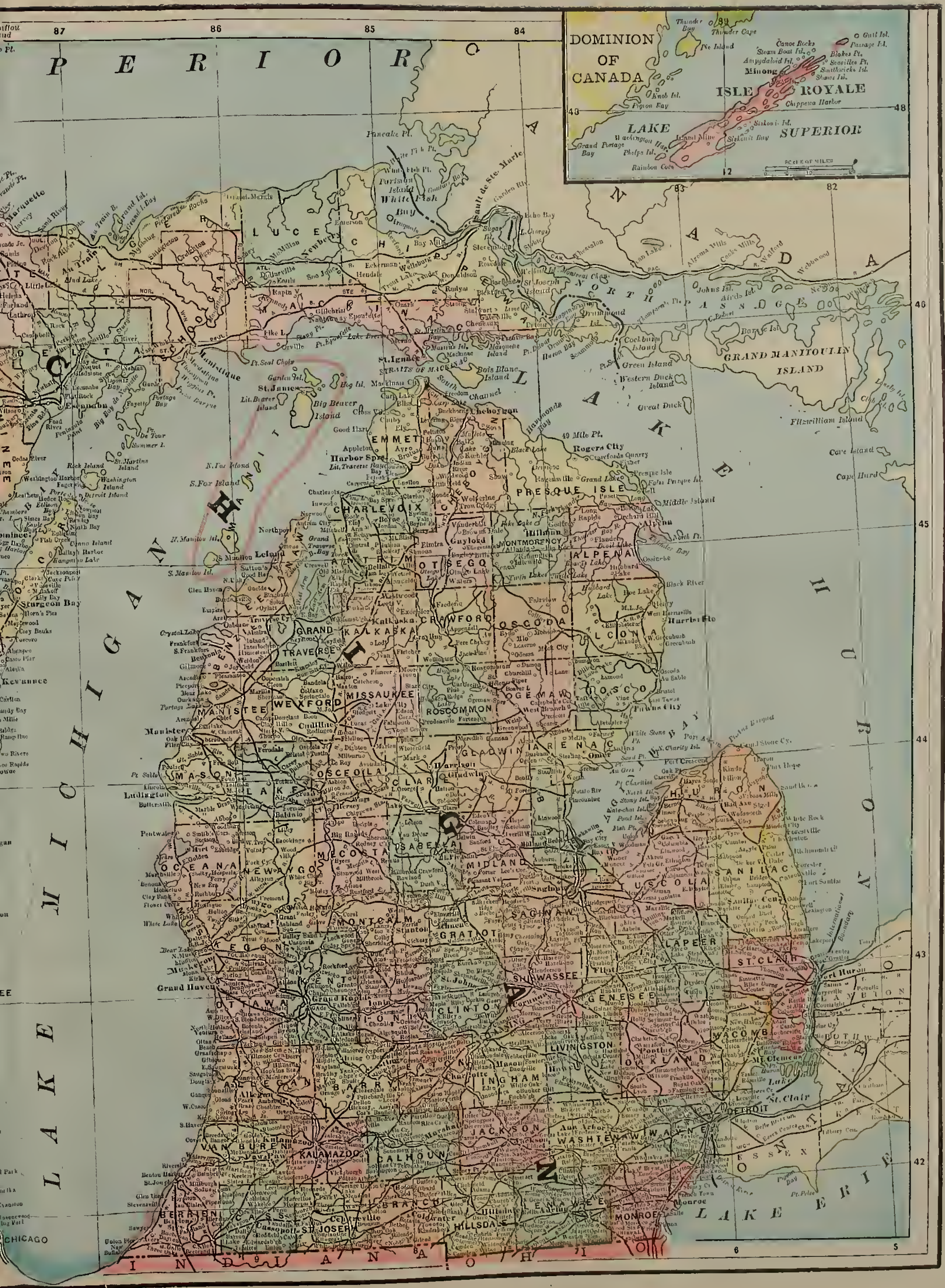

MAP OF
COLUMBUS
OHIO STATE UNIVERSITY
To Ohio State Fair Grounds
GOODALE PARK
OHIO PENITENTIARY
Water Works
Gas Works
CAPITOL
DEAF & DUMB ASYLUM
BLIND ASYLUM
U.S. BARRACKS
FRANKLIN PARK
LIVINGSTONE PARK
CITY PARK
Greenlawn Cemetery
Greenlawn & County Cemeteries
SCIOTO RIVER
OLENTANGY RIVER
C. A. & C. R. R.
P. C. C. & ST. L. R. R.
B. & O. R. R.
B. & O. SHOPS
C. C. C. & I. R. R.
L. M. R. R.
C. H. V. & T. SHOPS
BROAD
HIGH
LONG
MAIN
STATE
RICH
LIVINGSTONE AV.
MT. VERNON AV.
Steam Roads
Horse Roads

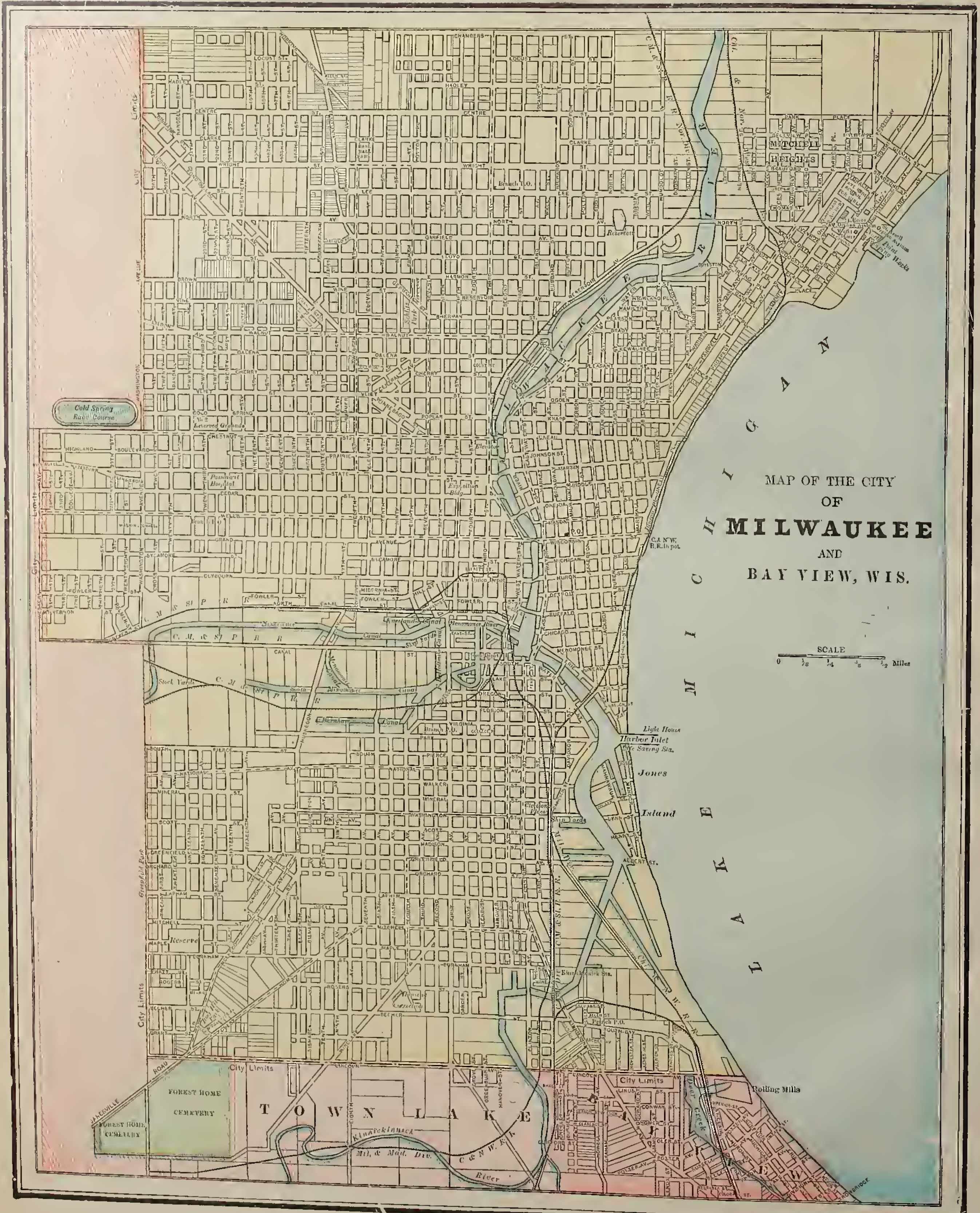

DETROIT
Steam Roads
DETROIT RIVER
ELMWOOD CEMETERY
City Line
BOULEVARD
Grand Trunk R.R.
West Detroit
Union Depot
Michigan Central Depot
Gas Works
Cass Park

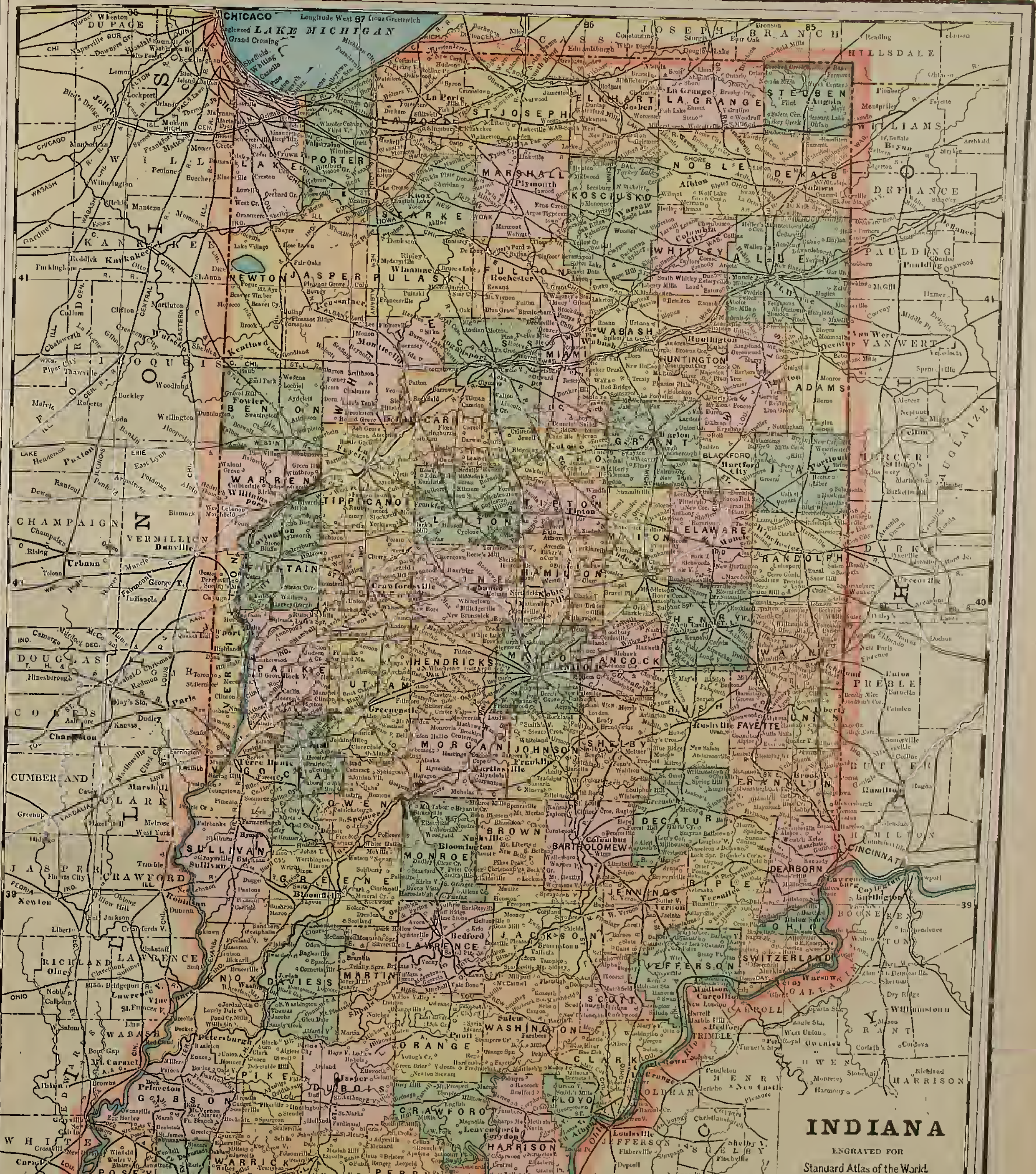


MICHIGAN AND WISCONSIN

90 Longitude West from Greenwich 89
13 Longitude West from Washington 12
LAKE SU
WISCONSIN
KEWEENAW
ONTONAGON
MARQUETTE
DICKINSON
FLORENCE
MARINETTE
DOUGLAS
BAYFIELD
ASHLAND
BURNETT
SAWYER
PRICE
POLK
BARRON
TAYLOR
LINCOLN
LANGLADE
FOREST
ST. CROIX
PIERCE
EAU CLAIRE
CLARK
MARATHON
SHAWANO
OUTAGAMIE
BROWN
WAUPACA
PORTAGE
WOOD
JACKSON
BUFFALO
LA CROSSE
MONROE
ADAMS
WAUSHARA
WINNEBAGO
CALUMET
MARQUETTE
GREEN LAKE
FOND DU LAC
SHEBOYGAN
VERNON
RICHLAND
SAUK
COLUMBIA
DODGE
CRAWFORD
GRANT
IOWA
DANE
JEFFERSON
WAUKESHA
MILWAUKEE
GREEN
LA FAYETTE
ROCK
WALWORTH
RACINE
KENOSHA
DAKOTA
GOODHUE
WABASHA
WINONA
OLMSTED
DODGE
FILLMORE
HOUSTON
MOWER
MITCHELL
HOWARD
WINNESHIEK
ALLAMAKEE
FLOYD
CHICKASAW
FAYETTE
CLAYTON
BUTLER
BREMER
BUCHANAN
DELAWARE
DUBUQUE
JACKSON
JONES
CLINTON
JO DAVIESS
STEPHENSON
WINNEBAGO
BOONE
McHENRY
LAKE
CARROLL
OGLE
DE KALB
KANE
DU PAGE
WHITESIDES
ILLINOIS
CHICAGO
SCALE OF MILES
0 5 10 20 30 40


DOMINION OF CANADA
ISLE ROYALE
LAKE SUPERIOR
Thunder Bay
Thunder Cape
Pie Island
Minong
Pigeon Bay
Grand Portage Bay
Washington Harbor
Chippewa Harbor
Siskowit Bay
Rainbow Cove
Passage Isl.
Gull Isl.
Blakes Pt.
SCALE OF MILES
48
89
88
87
86
85
84
83
82
46
45
44
43
42
P E R I O R
C A N A D A
L U C E
C H I P P E W A
M A C K I N A C
D E L T A
ALGOMA
NORTH CHANNEL
GRAND MANITOULIN ISLAND
Cockburn Island
Drummond Isl.
Fitzwilliam Island
Cove Island
Cape Hurd
Marquette
Munising
Grand Marais
Newberry
White Fish Bay
Whitefish Pt.
Sault de Ste. Marie
Sault Ste. Marie
Manistique
Escanaba
St. Ignace
STRAITS OF MACKINAC
Mackinaw City
Mackinac Island
Bois Blanc Island
Beaver Island
St. James
Big Beaver Island
Garden Isl.
Hog Isl.
N. Fox Island
S. Fox Island
N. Manitou Isl.
S. Manitou Isl.
Washington Island
Sturgeon Bay
Kewaunee
Green Bay
L A K E M I C H I G A N
M I C H I G A N
L A K E H U R O N
EMMET
Harbor Springs
Petoskey
Cheboygan
CHEBOYGAN
PRESQUE ISLE
Rogers City
Middle Island
CHARLEVOIX
Charlevoix
ANTRIM
OTSEGO
Gaylord
MONTMORENCY
ALPENA
Alpena
Thunder Bay
LEELANAU
Leland
BENZIE
GRAND TRAVERSE
Traverse City
KALKASKA
CRAWFORD
OSCODA
ALCONA
Harrisville
MANISTEE
Manistee
WEXFORD
Cadillac
MISSAUKEE
ROSCOMMON
OGEMAW
IOSCO
Tawas City
MASON
Ludington
LAKE
OSCEOLA
CLARE
GLADWIN
ARENAC
Saginaw Bay
OCEANA
NEWAYGO
MECOSTA
ISABELLA
MIDLAND
Bay City
HURON
TUSCOLA
SANILAC
MUSKEGON
Muskegon
MONTCALM
GRATIOT
SAGINAW
Saginaw
LAPEER
ST. CLAIR
Port Huron
Grand Haven
OTTAWA
KENT
Grand Rapids
IONIA
CLINTON
SHIAWASSEE
GENESEE
Flint
MACOMB
ALLEGAN
BARRY
EATON
Lansing
INGHAM
LIVINGSTON
OAKLAND
Pontiac
Mt. Clemens
Lake St. Clair
LAMBTON
VAN BUREN
KALAMAZOO
Kalamazoo
CALHOUN
JACKSON
Jackson
WASHTENAW
Ann Arbor
WAYNE
Detroit
ESSEX
BERRIEN
CASS
ST. JOSEPH
BRANCH
HILLSDALE
LENAWEE
MONROE
Monroe
KENT
L A K E E R I E
CHICAGO
I N D I A N A
O H I O
International Boundary


MAP OF THE CITY
OF
MILWAUKEE
AND
BAY VIEW, WIS.
SCALE
0 1/8 1/4 3/8 1/2 Miles
LAKE MICHIGAN
MILWAUKEE RIVER
MITCHELL HEIGHTS
Cold Spring Race Course
Reservoir
Exposition Bldg.
Union Depot
C. & N.W. R.R. Depot
Light House
Harbor Inlet
Life Saving Sta.
Jones Island
Ship Yards
Stock Yards
Menomonee River
Kinnickinnick River
FOREST HOME CEMETERY
TOWN LAKE
BAY VIEW
Rolling Mills
City Limits
C. M. & St. P. R. R.
C. & N. W. R. R.
Janesville Road



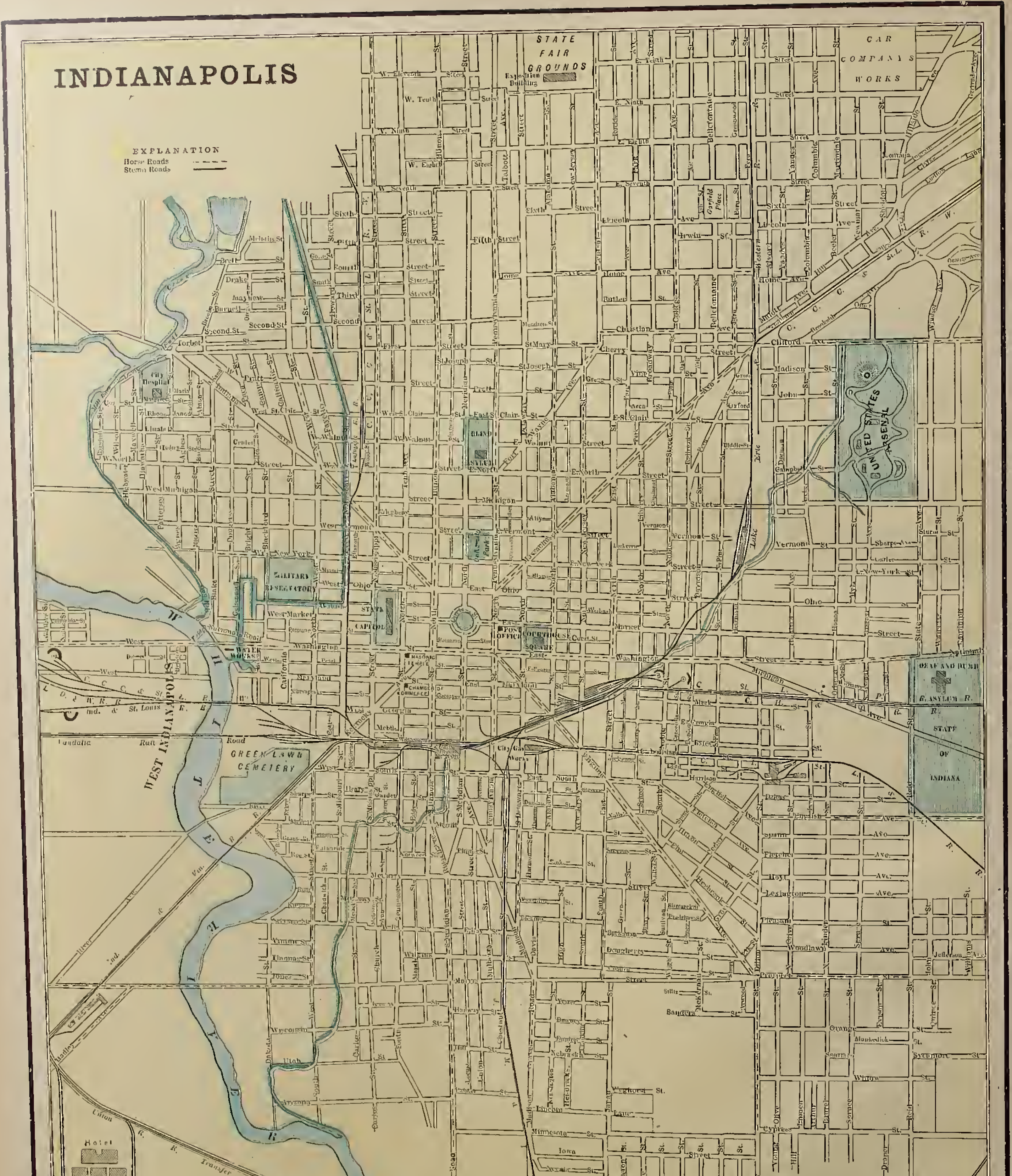
INDIANA

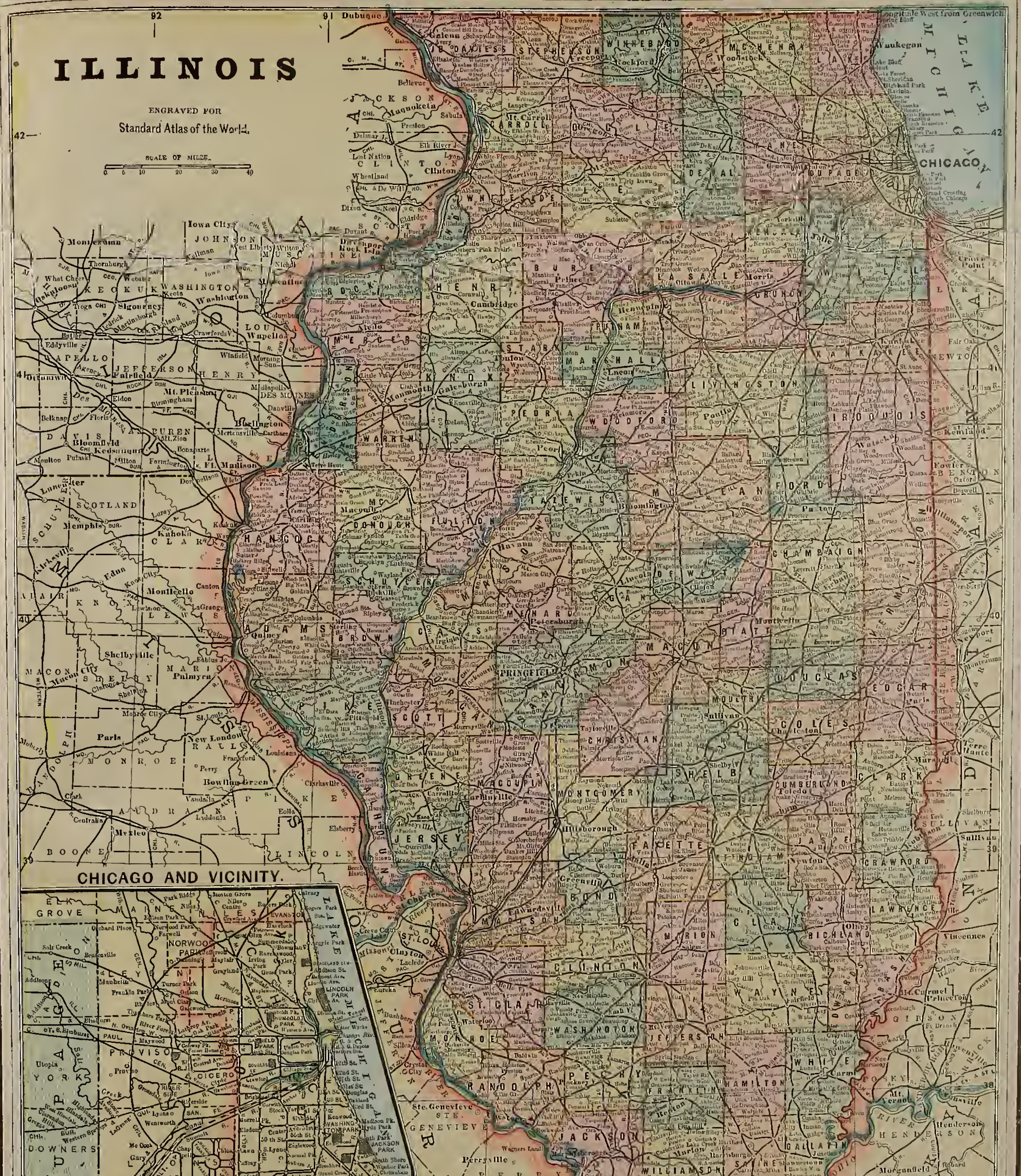
ENGRAVED FOR

Standard Atlas of the World.

SCALE OF MILES

0 5 10 20 30
Longitude West 87 from Greenwich
LAKE MICHIGAN
CHICAGO
LAKE
PORTER
LA PORTE
ST. JOSEPH
ELKHART
LA GRANGE
STEUBEN
NOBLE
DE KALB
MARSHALL
KOSCIUSKO
STARKE
NEWTON
JASPER
PULASKI
FULTON
WHITLEY
ALLEN
WABASH
HUNTINGTON
ADAMS
BENTON
WHITE
CARROLL
CASS
MIAMI
GRANT
WELLS
BLACKFORD
JAY
WARREN
TIPPECANOE
CLINTON
TIPTON
HOWARD
MADISON
DELAWARE
RANDOLPH
FOUNTAIN
MONTGOMERY
BOONE
HAMILTON
HENRY
WAYNE
VERMILLION
PARKE
PUTNAM
HENDRICKS
MARION
HANCOCK
RUSH
FAYETTE
UNION
VIGO
CLAY
MORGAN
JOHNSON
SHELBY
DECATUR
FRANKLIN
OWEN
MONROE
BROWN
BARTHOLOMEW
SULLIVAN
GREENE
LAWRENCE
JACKSON
JENNINGS
RIPLEY
DEARBORN
OHIO
SWITZERLAND
KNOX
DAVIESS
MARTIN
WASHINGTON
SCOTT
JEFFERSON
CLARK
ORANGE
DUBOIS
PIKE
GIBSON
POSEY
VANDERBURGH
WARRICK
SPENCER
PERRY
CRAWFORD
HARRISON
FLOYD
ILLINOIS
KENTUCKY
CINCINNATI
LOUISVILLE


INDIANAPOLIS
EXPLANATION
Horse Roads
Steam Roads
STATE FAIR GROUNDS
Exposition Building
CAR COMPANY'S WORKS
UNITED STATES ARSENAL
BLIND ASYLUM
Military Park
MILITARY RESERVATION
STATE CAPITOL
POST OFFICE
COURT HOUSE SQUARE
MASONIC TEMPLE
CHAMBER OF COMMERCE
City Gas Works
WATER WORKS
City Hospital
GREEN LAWN CEMETERY
WEST INDIANAPOLIS
WHITE RIVER
DEAF AND DUMB ASYLUM
STATE OF INDIANA
Hotel
STOCK YARDS
Union R.R. Transfer &
Stock Yard Co. Track

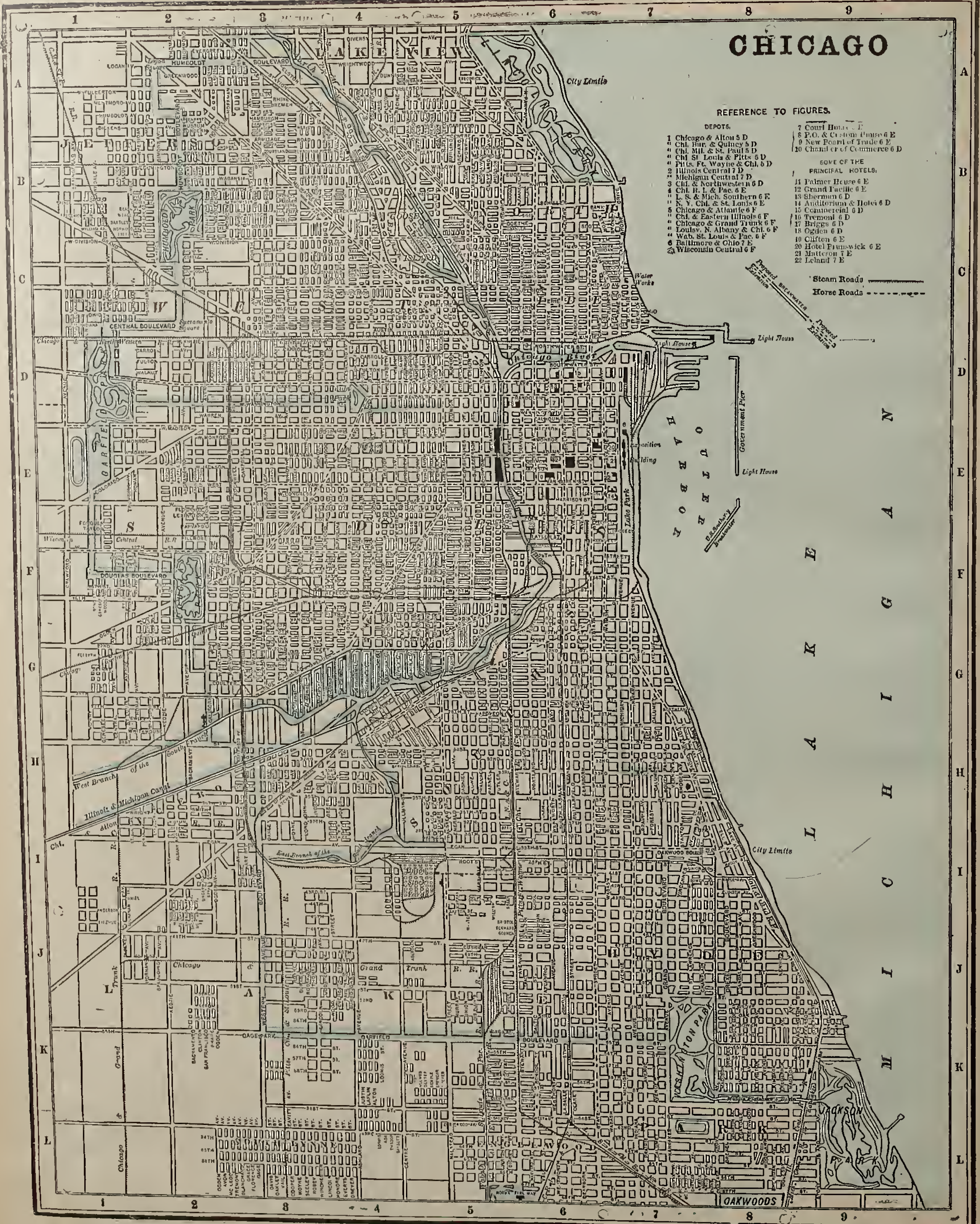


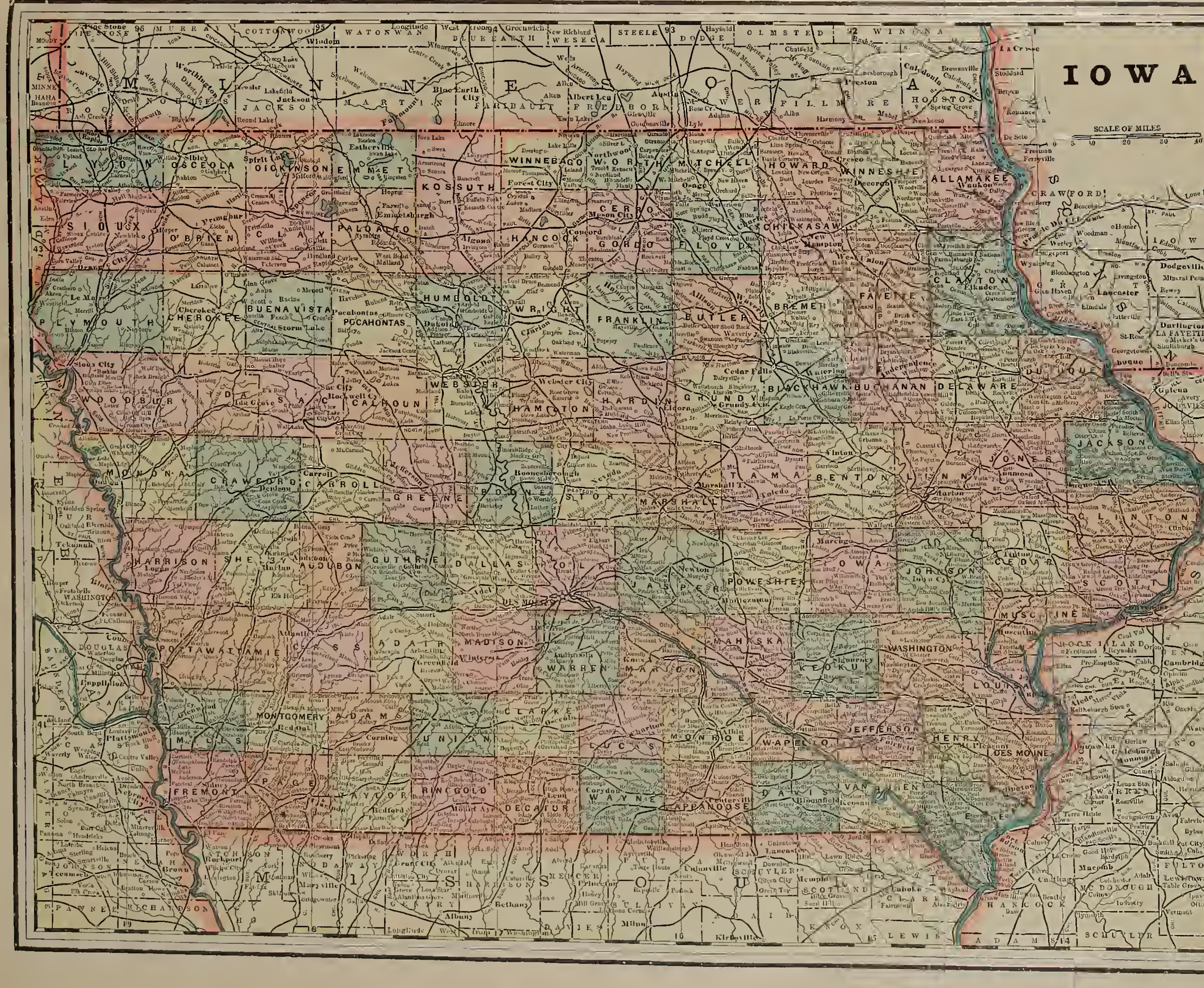
ILLINOIS

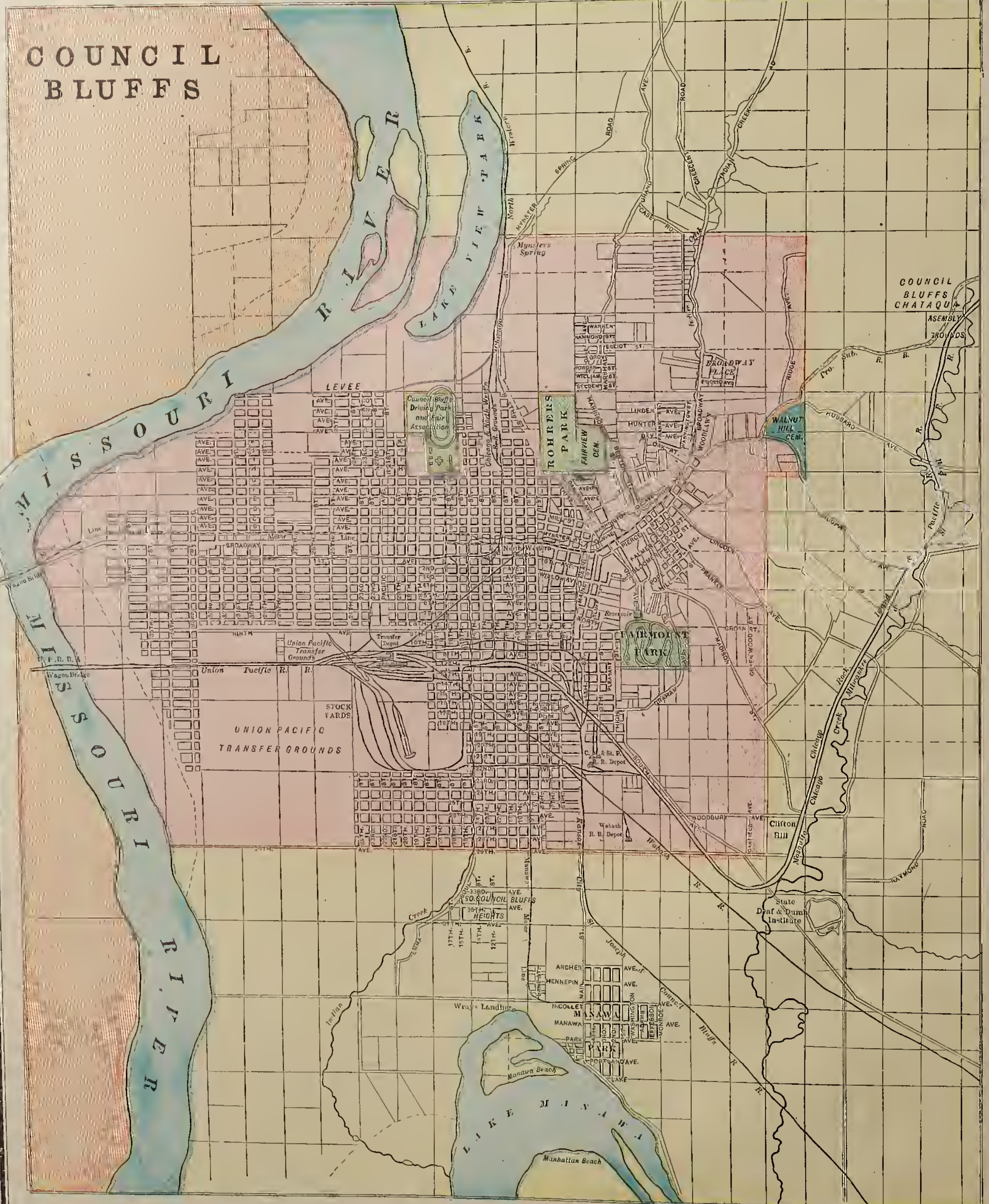
ENGRAVED FOR
Standard Atlas of the World.

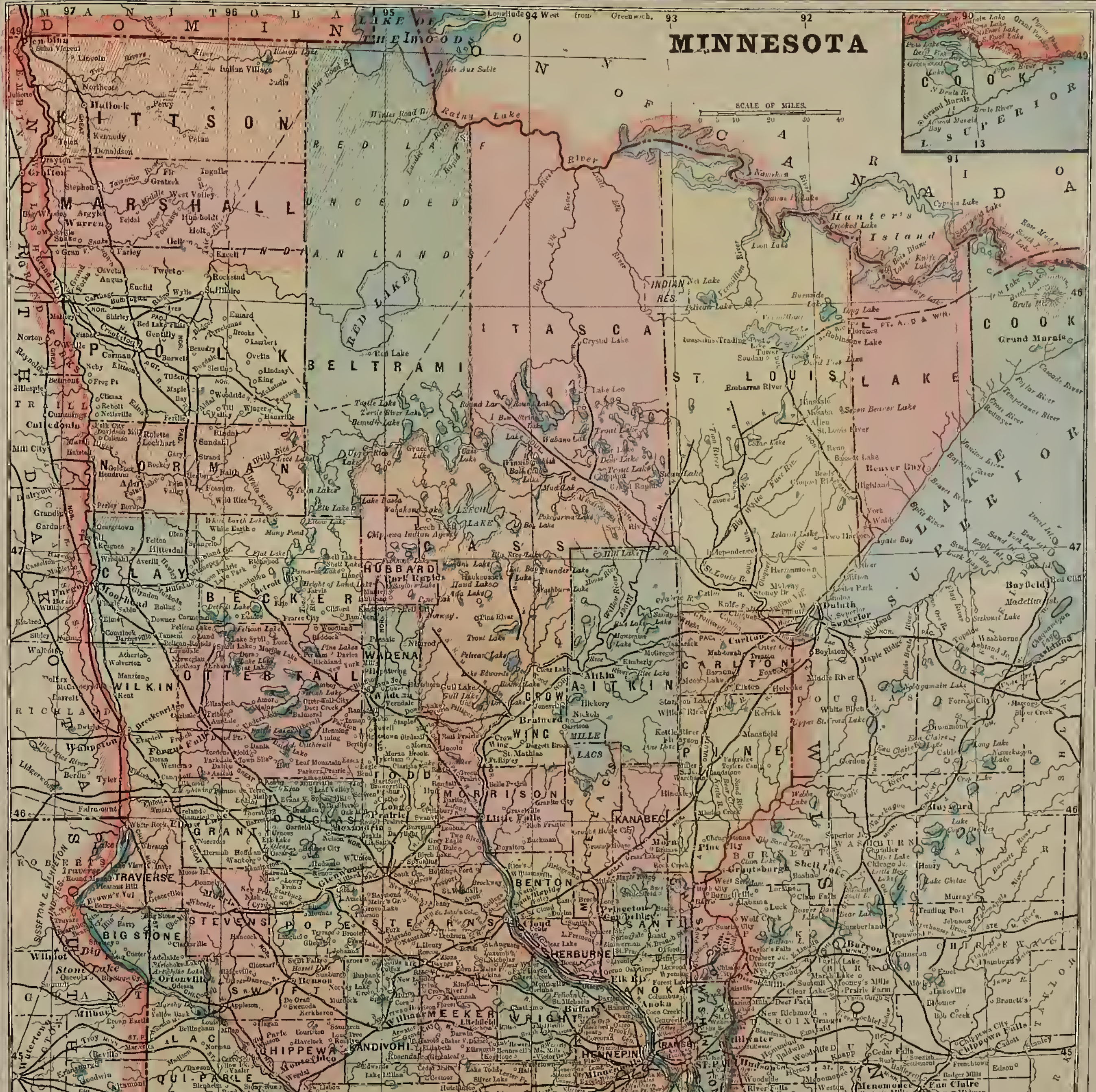
CHICAGO AND VICINITY.

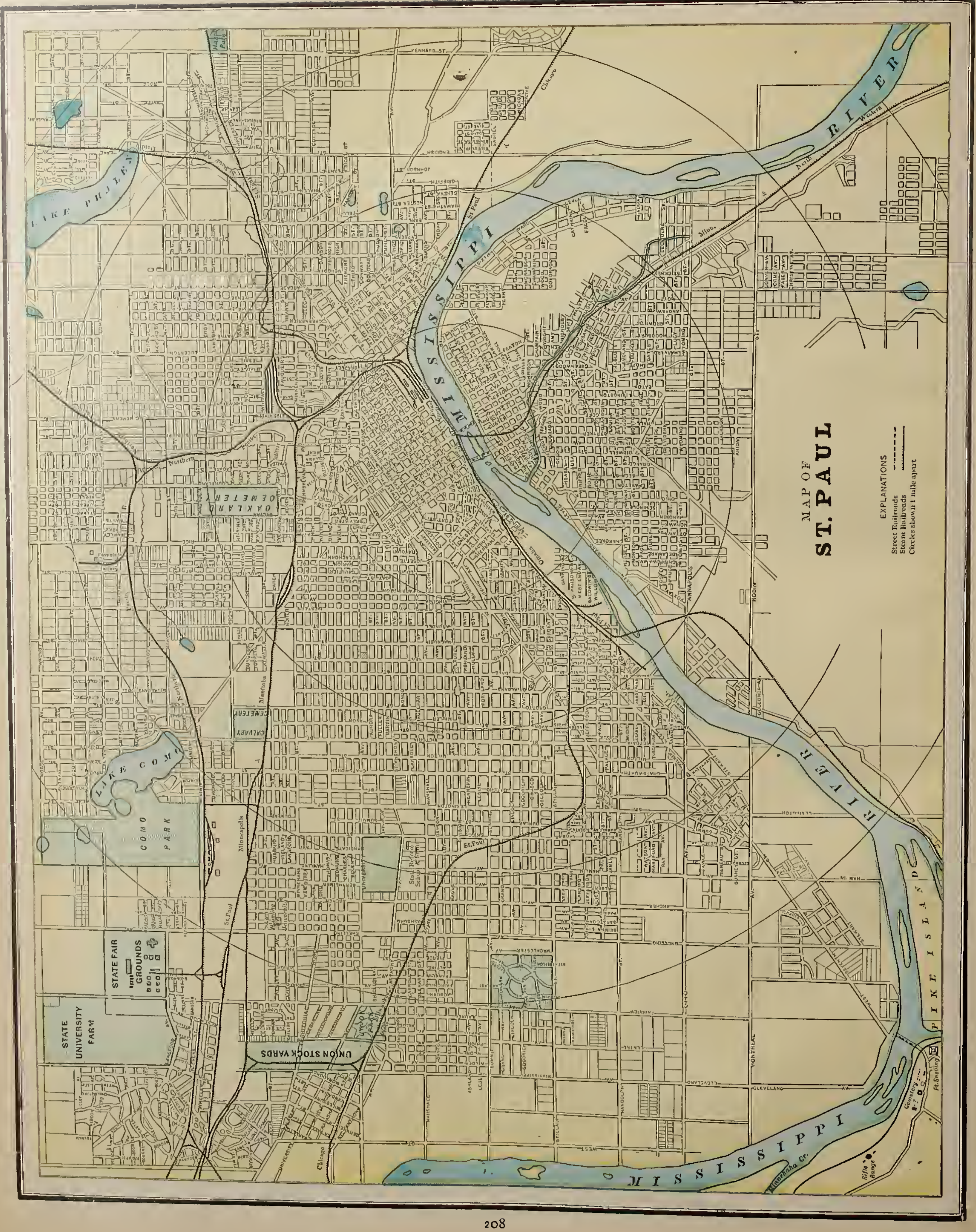
SCALE OF MILES.
0 5 10 20 30 40
92
91
90
89
Longitude West from Greenwich
42
41
40
39
38
LAKE MICHIGAN
CHICAGO
ST. LOUIS
Springfield
Peoria
Quincy
Rockford
Galena
Cairo
Dubuque
MISSISSIPPI
ILLINOIS
OHIO RIVER
JO DAVIESS
STEPHENSON
WINNEBAGO
McHENRY
LAKE
CARROLL
OGLE
DE KALB
KANE
DU PAGE
COOK
WHITESIDE
LEE
ROCK ISLAND
HENRY
BUREAU
LA SALLE
GRUNDY
WILL
KANKAKEE
MERCER
KNOX
STARK
PUTNAM
MARSHALL
LIVINGSTON
IROQUOIS
HENDERSON
WARREN
PEORIA
WOODFORD
McLEAN
FORD
HANCOCK
McDONOUGH
FULTON
TAZEWELL
SCHUYLER
MASON
LOGAN
DE WITT
CHAMPAIGN
VERMILION
ADAMS
BROWN
CASS
MENARD
PIATT
MACON
PIKE
SCOTT
MORGAN
SANGAMON
MOULTRIE
DOUGLAS
EDGAR
CHRISTIAN
COLES
GREENE
MACOUPIN
MONTGOMERY
SHELBY
CUMBERLAND
CLARK
JERSEY
CALHOUN
MADISON
BOND
FAYETTE
EFFINGHAM
JASPER
CRAWFORD
ST. CLAIR
CLINTON
MARION
CLAY
RICHLAND
LAWRENCE
MONROE
WASHINGTON
JEFFERSON
WAYNE
EDWARDS
WABASH
RANDOLPH
PERRY
FRANKLIN
HAMILTON
WHITE
JACKSON
WILLIAMSON
SALINE
GALLATIN
UNION
JOHNSON
POPE
HARDIN
ALEXANDER
PULASKI
MASSAC
IOWA
MISSOURI
INDIANA
KENTUCKY
ELK GROVE
MAINE
NILES
EVANSTON
NORWOOD PARK
LEYDEN
JEFFERSON
LAKE VIEW
PROVISO
CICERO
LYONS
LAKE
HYDE PARK
DOWNERS GROVE
YORK
WORTH
PALOS
LEMONT
CALUMET
ORLAND
BREMEN
THORNTON
HOMER
WILL


CHICAGO
REFERENCE TO FIGURES.
DEPOTS.
1 Chicago & Alton 5 D
" Chi. Bur. & Quincy 5 D
" Chi. Mil. & St. Paul 5 D
" Chi St Louis & Pitts 5 D
" Pitts. Ft. Wayne & Chi. 5 D
2 Illinois Central 7 D
" Michigan Central 7 D
3 Chi. & Northwestern 6 D
4 Chi. R. I. & Pac. 6 E
" L. S. & Mich. Southern 6 E
" N. Y. Chi. & St. Louis 6 E
5 Chicago & Atlantic 6 F
" Chi. & Eastern Illinois 6 F
" Chicago & Grand Trunk 6 F
" Louisv. N. Albany & Chi. 6 F
" Wab. St. Louis & Pac. 6 F
6 Baltimore & Ohio 7 E
23 Wisconsin Central 6 F
7 Court House 6 E
8 P.O. & Custom House 6 E
9 New Board of Trade 6 E
10 Chamber of Commerce 6 D
SOME OF THE PRINCIPAL HOTELS.
11 Palmer House 6 E
12 Grand Pacific 6 E
13 Sherman 6 D
14 Auditorium & Hotel 6 D
15 Commercial 6 D
16 Tremont 6 D
17 Briggs 6 D
18 Ogden 6 D
19 Clifton 6 E
20 Hotel Brunswick 6 E
21 Matteson 7 E
22 Leland 7 E
Steam Roads
Horse Roads
L A K E V I E W
City Limits
Water Works
Proposed Extension
BREAKWATER
Light House
Chicago River
OUTER HARBOR
Government Pier
Exposition Building
Lake Park
L A K E M I C H I G A N
West Branch of the South Branch
Illinois & Michigan Canal
East Branch of the South Branch
HUMBOLDT PARK
GARFIELD PARK
DOUGLAS BOULEVARD
CENTRAL BOULEVARD
WASHINGTON PARK
JACKSON PARK
OAKWOODS
1 2 3 4 5 6 7 8 9
A B C D E F G H I J K L


IOWA
SCALE OF MILES
0 5 10 20 30 40


COUNCIL BLUFFS
MISSOURI RIVER
LAKE VIEW PARK
Mynsters Spring
LEVEE
Council Bluffs Driving Park and Fair Association
ROHRERS PARK
FAIRVIEW CEM.
BROADWAY PLACE
WALNUT HILL CEM.
COUNCIL BLUFFS CHATAQUA ASEMBLY GROUNDS
BROADWAY
Motor Line
Wagon Bridge
U. P. R. R. B.
Union Pacific Transfer Grounds
Transfer Depot
Union Pacific R. R.
STOCK YARDS
UNION PACIFIC TRANSFER GROUNDS
FAIRMOUNT PARK
Reservoir
C. M. & St. P. R. R. Depot
Wabash R. R. Depot
Wabash R. R.
Clifton Hill
State Deaf & Dumb Institute
Chicago Rock Island & Pacific R. R.
Chicago Milwaukee & St. Paul R. R.
Chicago & North Western R. R.
SO. COUNCIL BLUFFS HEIGHTS
Indian Creek
Wrays Landing
MANAWA PARK
Manawa Beach
LAKE MANAWA
Manhattan Beach
St. Joseph & Council Bluffs R. R.
Motor Line
ARCHER AVE.
HENNEPIN AVE.
MCCOLLET AVE.
MANAWA AVE.
PORTLAND AVE.
Spring Road
Mynster St.
Crescent Road
Indian Creek Road
Grand Ave.
Case St.
Oak St.
Ridge Ave.
Hubbard Ave.
Linden Ave.
Hunter Ave.
Woodbury Ave.
Graham Ave.
Madison St.
Lincoln Ave.
Franklin Ave.
Pierce St.
Willow Ave.
Raymond Road
Garfield Ave.
Greenwood St.
Ninth Ave.
Pro. Sub. R. R.

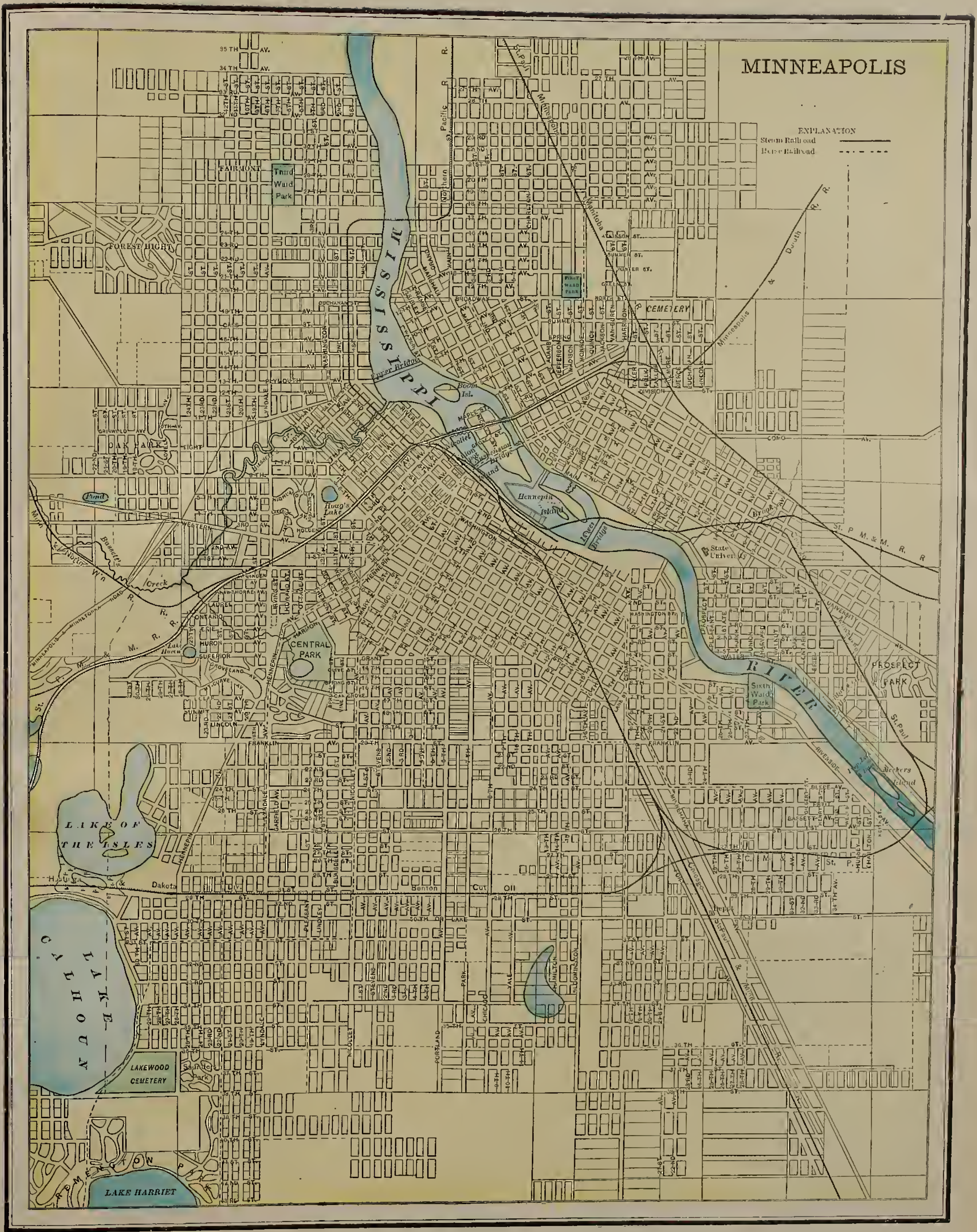

MINNESOTA
SCALE OF MILES.
0 5 10 20 30 40
DOMINION OF CANADA
MANITOBA
LAKE OF THE WOODS
Rainy Lake
Rainy River
Longitude 94 West from Greenwich
97
96
95
93
92
91
90
49
48
47
46
45
44
13
14
17
18
19
20
KITTSON
MARSHALL
POLK
NORMAN
CLAY
WILKIN
BECKER
OTTER TAIL
GRANT
DOUGLAS
TRAVERSE
STEVENS
POPE
BIG STONE
SWIFT
LAC QUI PARLE
CHIPPEWA
KANDIYOHI
MEEKER
WRIGHT
HENNEPIN
RAMSEY
ANOKA
SHERBURNE
BENTON
STEARNS
TODD
MORRISON
WADENA
HUBBARD
CASS
CROW WING
AITKIN
ITASCA
BELTRAMI
ST. LOUIS
LAKE
COOK
CARLTON
PINE
KANABEC
MILLE LACS
ISANTI
CHISAGO
WASHINGTON
DAKOTA
SCOTT
CARVER
McLEOD
RENVILLE
YELLOW MEDICINE
LINCOLN
LYON
REDWOOD
SIBLEY
NICOLET
BROWN
COTTONWOOD
MURRAY
PIPESTONE
ROCK
NOBLES
JACKSON
MARTIN
WATONWAN
BLUE EARTH
LE SUEUR
RICE
GOODHUE
WABASHA
WINONA
OLMSTED
DODGE
STEELE
WASECA
FARIBAULT
FREEBORN
MOWER
FILLMORE
HOUSTON
RED LAKE
UNCEDED INDIAN LANDS
INDIAN RES.
MILLE LACS
LAKE SUPERIOR
Hunter's Island
Minneapolis
St. Paul
Duluth
Superior
Moorhead
Brainerd
St. Cloud
Stillwater
Red Wing
Winona
Mankato
Faribault
Rochester
Fergus Falls
Crookston
Grand Forks
Wahpeton
La Crosse
Grand Marais
Two Harbors
Worthington
Albert Lea
Austin
Owatonna
New Ulm
Willmar
Hastings
Lake City
Wabasha
Ashland
Bayfield
Eau Claire
Chippewa Falls
Hudson
River Falls
Brookings
Flandreau
Sioux Falls
Milbank
Watertown
Sisseton
DAKOTA
RICHLAND
ROBERTS
GRANT
DEUEL
HAMLIN
BROOKINGS
MOODY
MINNEHAHA
LINCOLN
TRAILL
CASS
IOWA
WISCONSIN
DOUGLAS
BAYFIELD
ASHLAND
WASHBURN
SAWYER
BURNETT
POLK
BARRON
CHIPPEWA
ST. CROIX
DUNN
PIERCE
PEPIN
EAU CLAIRE
BUFFALO
TREMPEALEAU
JACKSON
LA CROSSE
MONROE
VERNON
TAYLOR
CLARK
Lake Mills
Longitude West from Washington

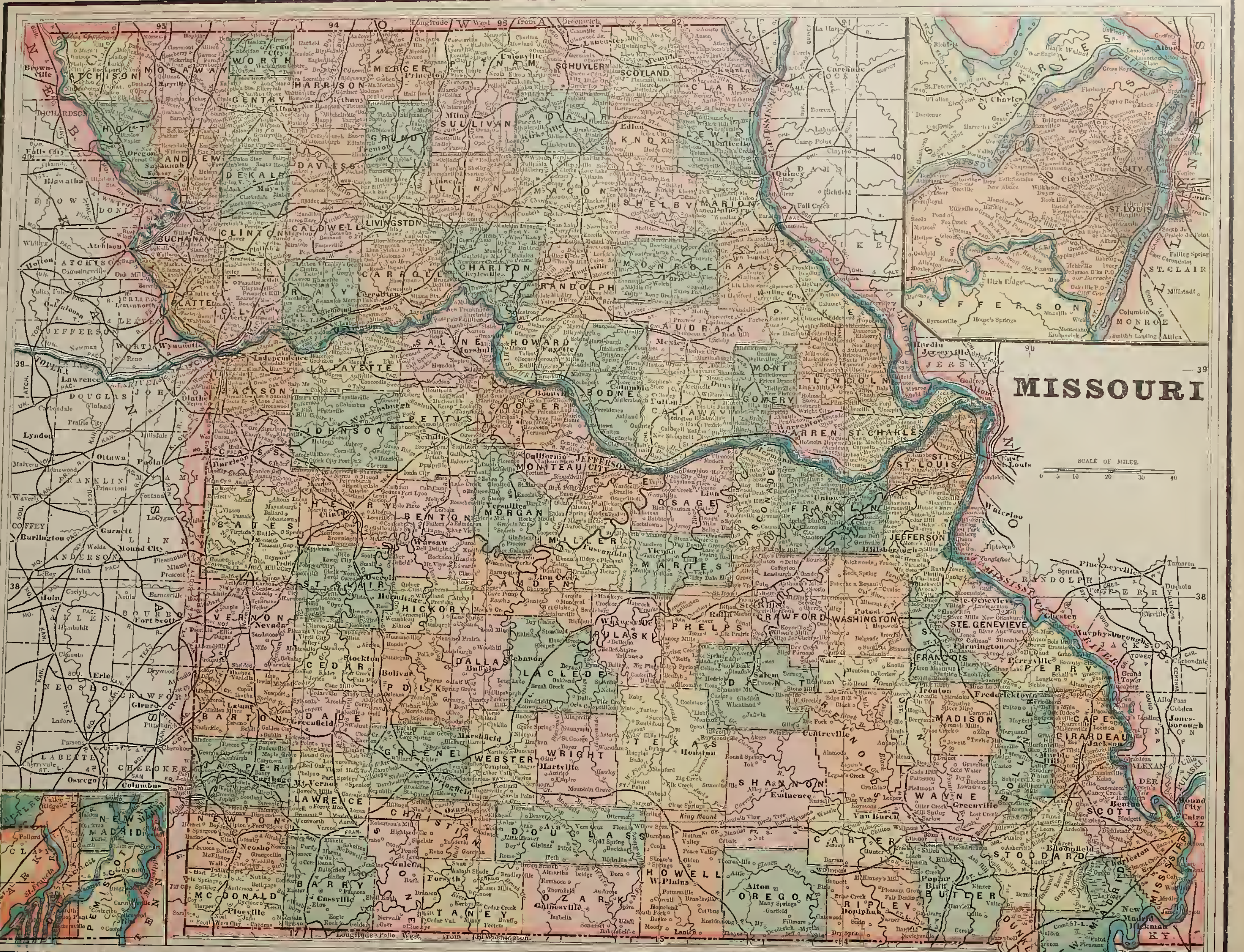


MAP OF
ST. PAUL

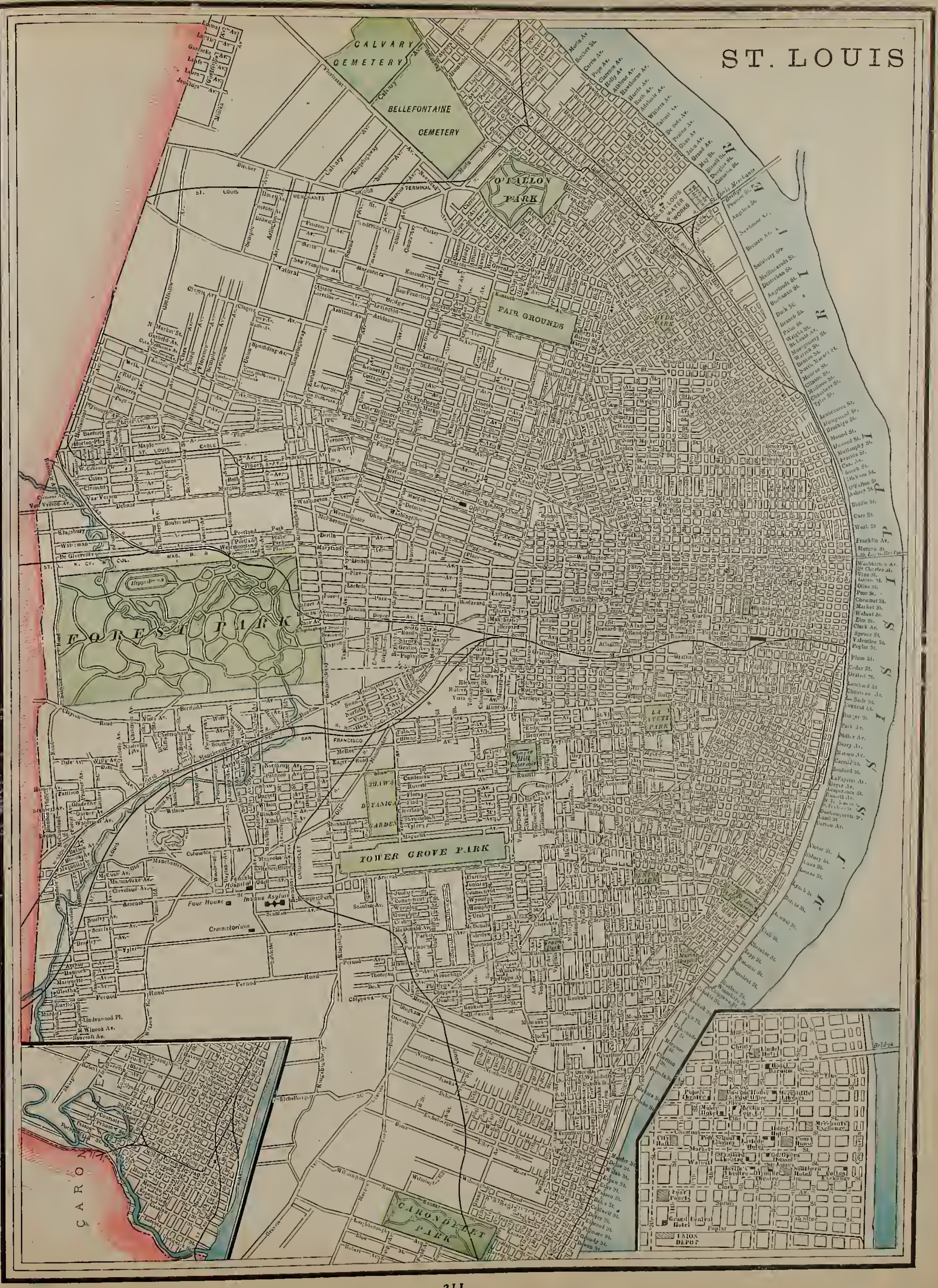
EXPLANATIONS
Street Railroads
Steam Railroads
Circles shown 1 mile apart

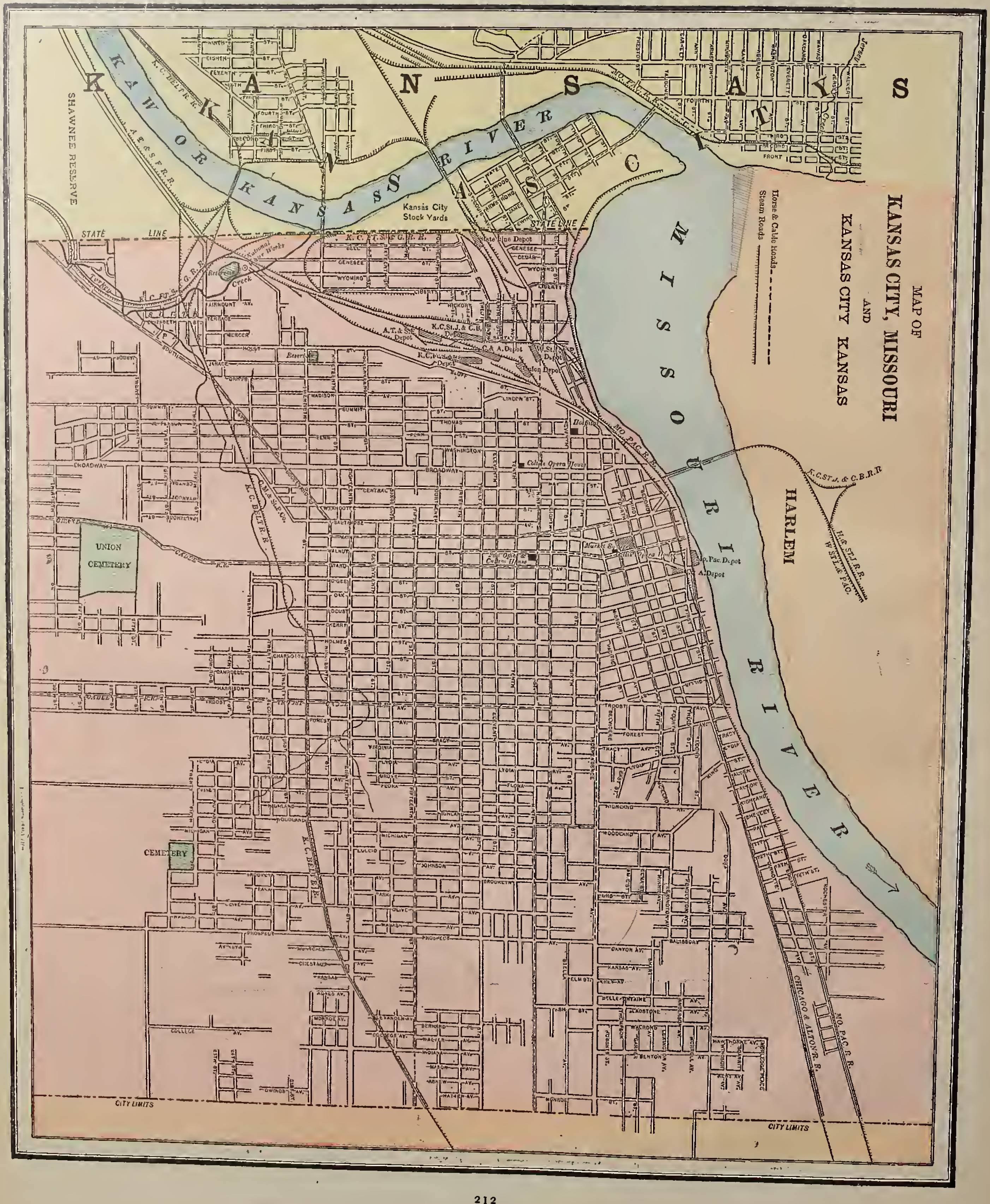
MISSISSIPPI
RIVER
MISSISSIPPI
RIVER
LAKE PHALEN
LAKE COMO
COMO PARK
STATE FAIR GROUNDS
STATE UNIVERSITY FARM
UNION STOCK YARDS
OAKLAND CEMETERY
CALVARY CEMETERY
PIKE ISLAND
Ft. Snelling
Cemetery
Rifle Range
Minnehaha Cr.
State Reform School
Northern
Manitoba
Minneapolis
St. Paul
Chicago
Milw.
North Western
Omaha

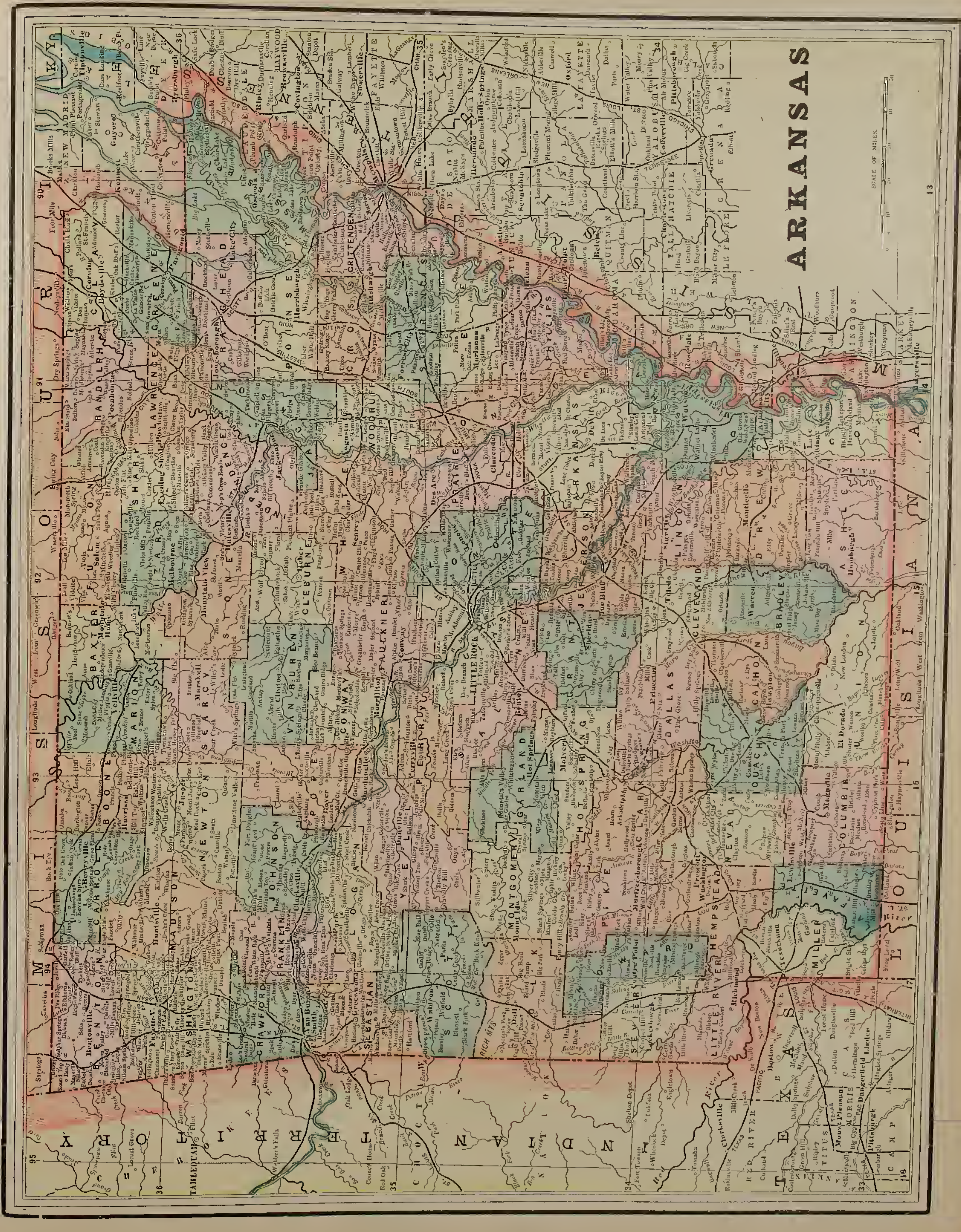

MINNEAPOLIS
EXPLANATION
Steam Railroad
Horse Railroad
MISSISSIPPI
RIVER
FAIRMONT
Third Ward Park
FOREST HIGHT
First Ward Park
CEMETERY
Boom Isl.
Hennepin Island
Lower Bridge
Upper Bridge
Suspension Bridge
State Univers'y
OAK PARK
Pond
Hoag's Lake
Bassetts Creek
Lake Huron
CENTRAL PARK
Sixth Ward Park
PROSPECT PARK
Meekers Island
LAKE OF THE ISLES
LAKE CALHOUN
LAKEWOOD CEMETERY
LAKE HARRIET
Minneapolis & Duluth R. R.
St. P. M. & M. R. R.
Manitoba
Northern Pacific R. R.
Minneapolis & St. Louis
C. M. & St. P.
BROADWAY
WASHINGTON
HENNEPIN
NICOLLET
FRANKLIN
RIVERSIDE
COMO
UNIVERSITY
Dakota
Benton
Cut Off
Lake
St. Paul

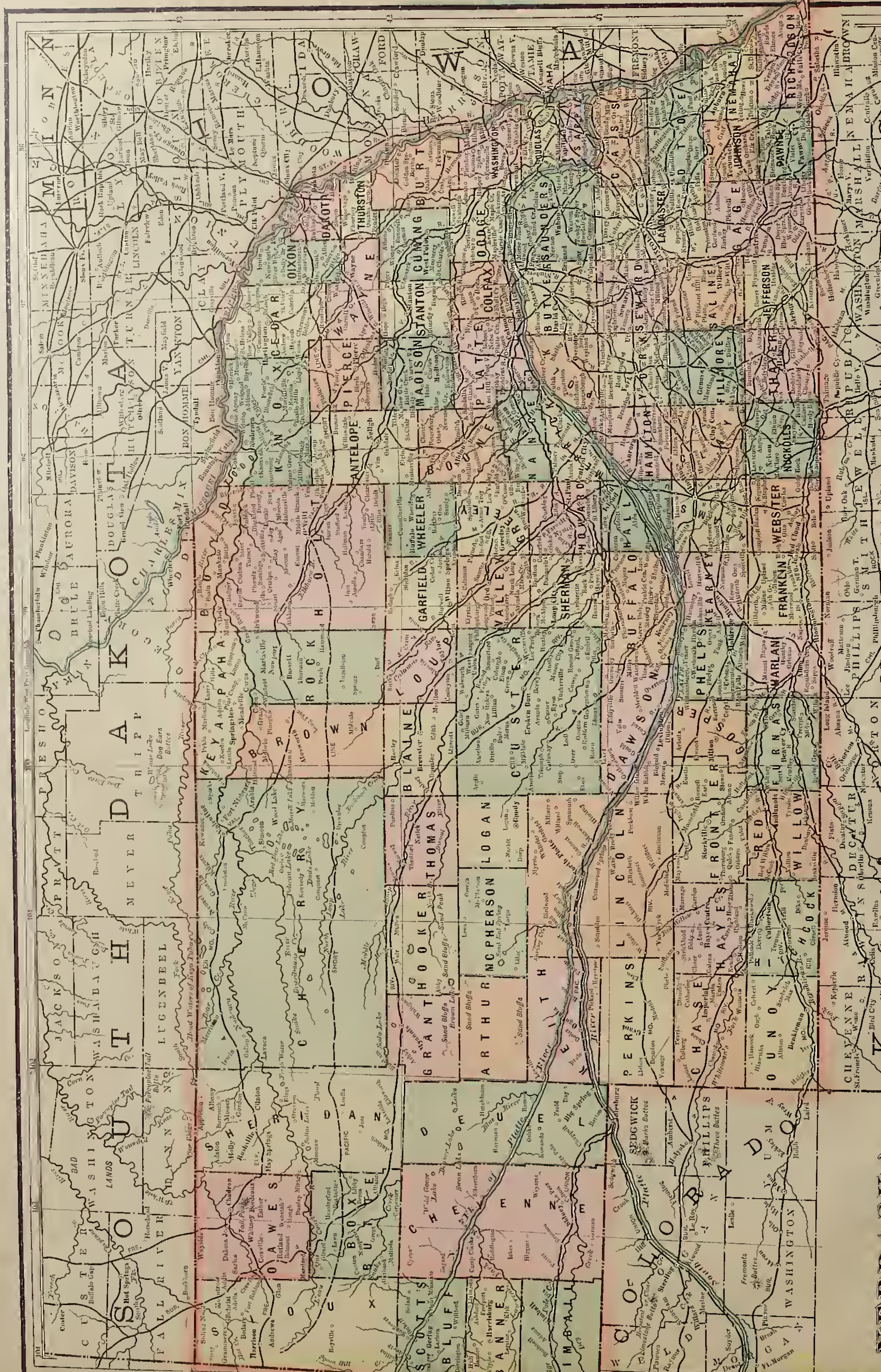

MISSOURI
SCALE OF MILES.
0 5 10 20 30 40

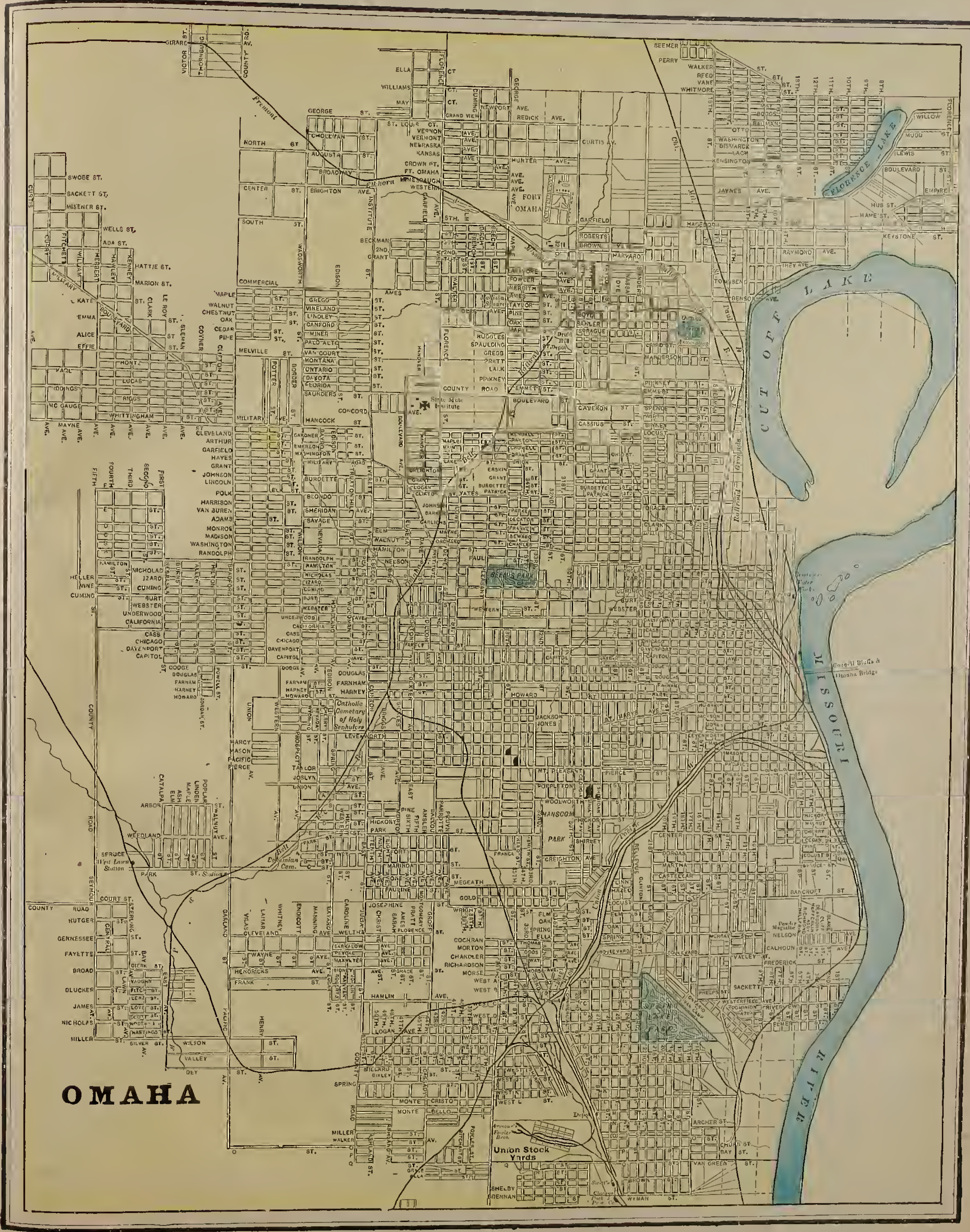
ST. LOUIS

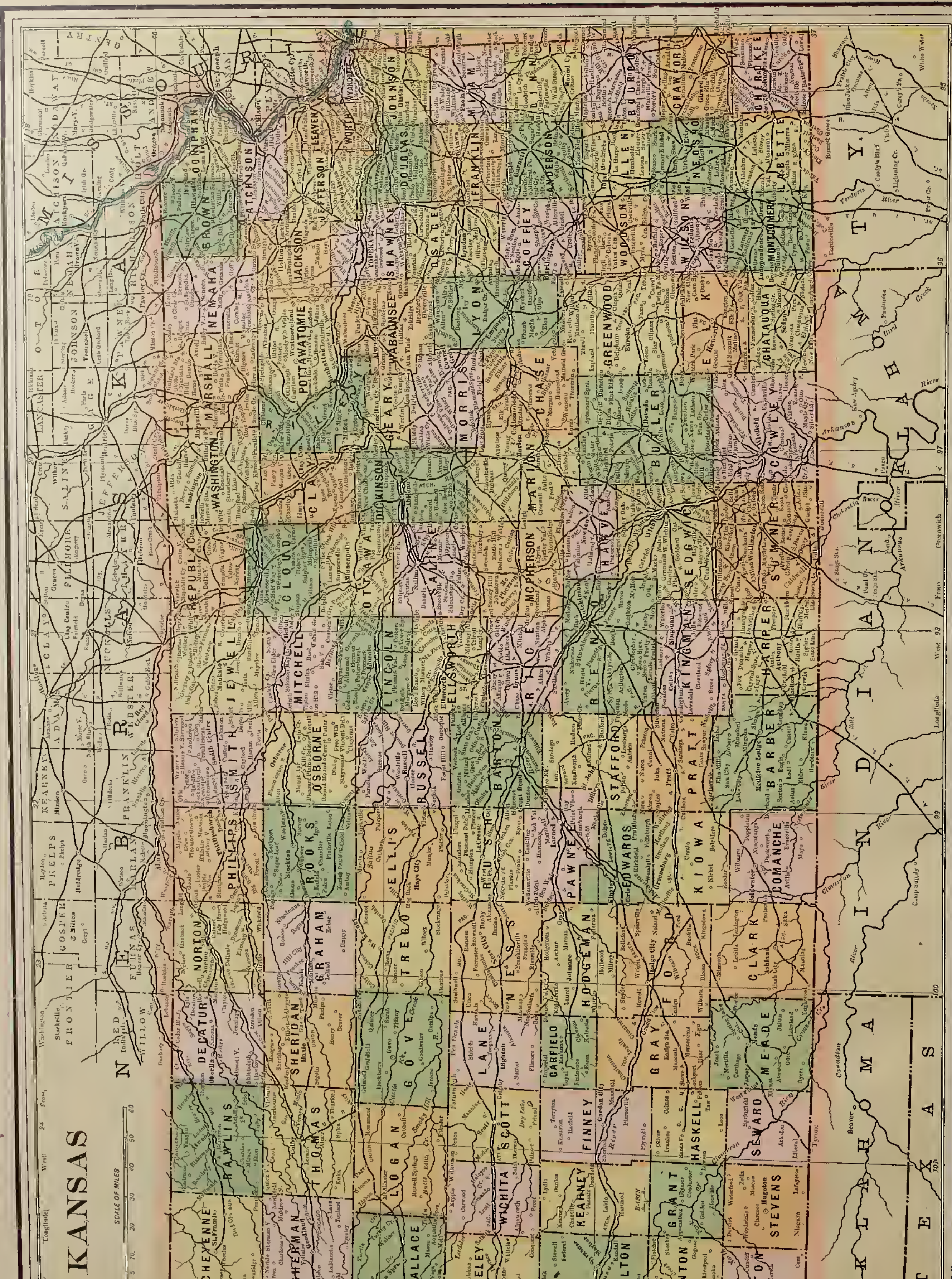

CALVARY CEMETERY
BELLEFONTAINE CEMETERY
O'FALLON PARK
ST. LOUIS WATER WORKS
FAIR GROUNDS
HYDE PARK
FOREST PARK
SHAW'S BOTANICAL GARDEN
TOWER GROVE PARK
LA FAYETTE PARK
Compton Hill Reservoir
Insane Asylum
Female Hospital
Poor House
Crematorium
CARONDELET PARK
UNION DEPOT
MISSISSIPPI R.
CARON
Lindell Hotel
Court House
Post Office
Mercantile Library
City Hall
Merchants Exchange
Grand Opera House
Southern Hotel
Four Courts
Grand Central Hotel
UNION DEPOT

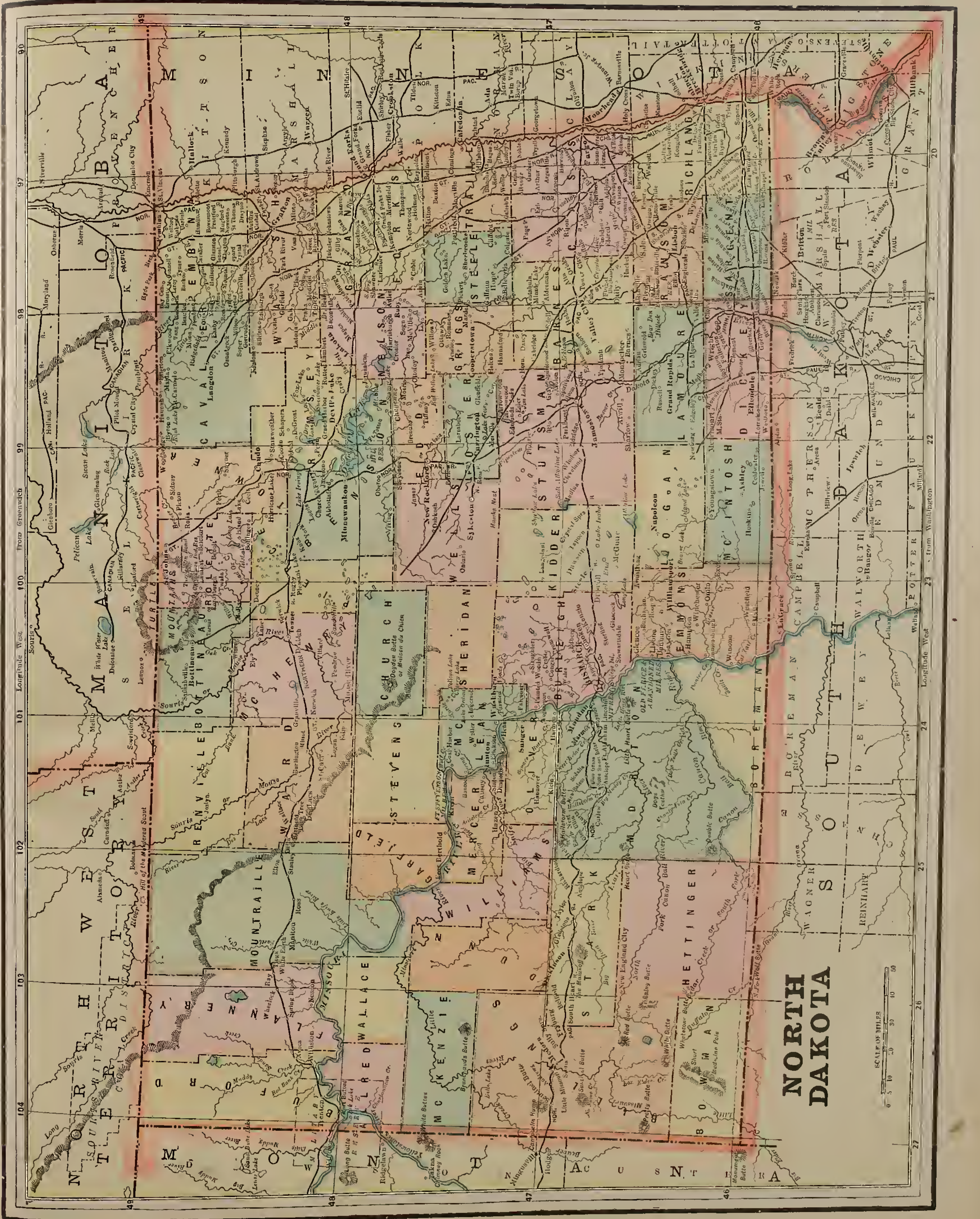

MAP OF
KANSAS CITY, MISSOURI
AND
KANSAS CITY KANSAS
Horse & Cable Roads
Steam Roads
KANSAS CITY KANSAS
KAW OR KANSAS RIVER
MISSOURI RIVER
SHAWNEE RESERVE
Kansas City Stock Yards
STATE LINE
HARLEM
UNION CEMETERY
CEMETERY
CITY LIMITS
K. C. BELT R. R.
MO. PAC. R. R.
CHICAGO & ALTON R. R.
A. T. & S. F. R. R.
K. C. ST. J. & C. B. R. R.
H. & ST. J. R. R.
W. ST. L. & PAC.
State Line Depot
A. T. & S. F. Depot
K. C. St. J. & C. B. Depot
C. & A. Depot
W. St. L. & P. Depot
Union Depot
Hospital
Coates Opera House
Post Office & Custom House
Market Sq.
Gillis Opera House
Mo. Pac. Depot
C. & A. Depot
Turkey Creek
Reservoir

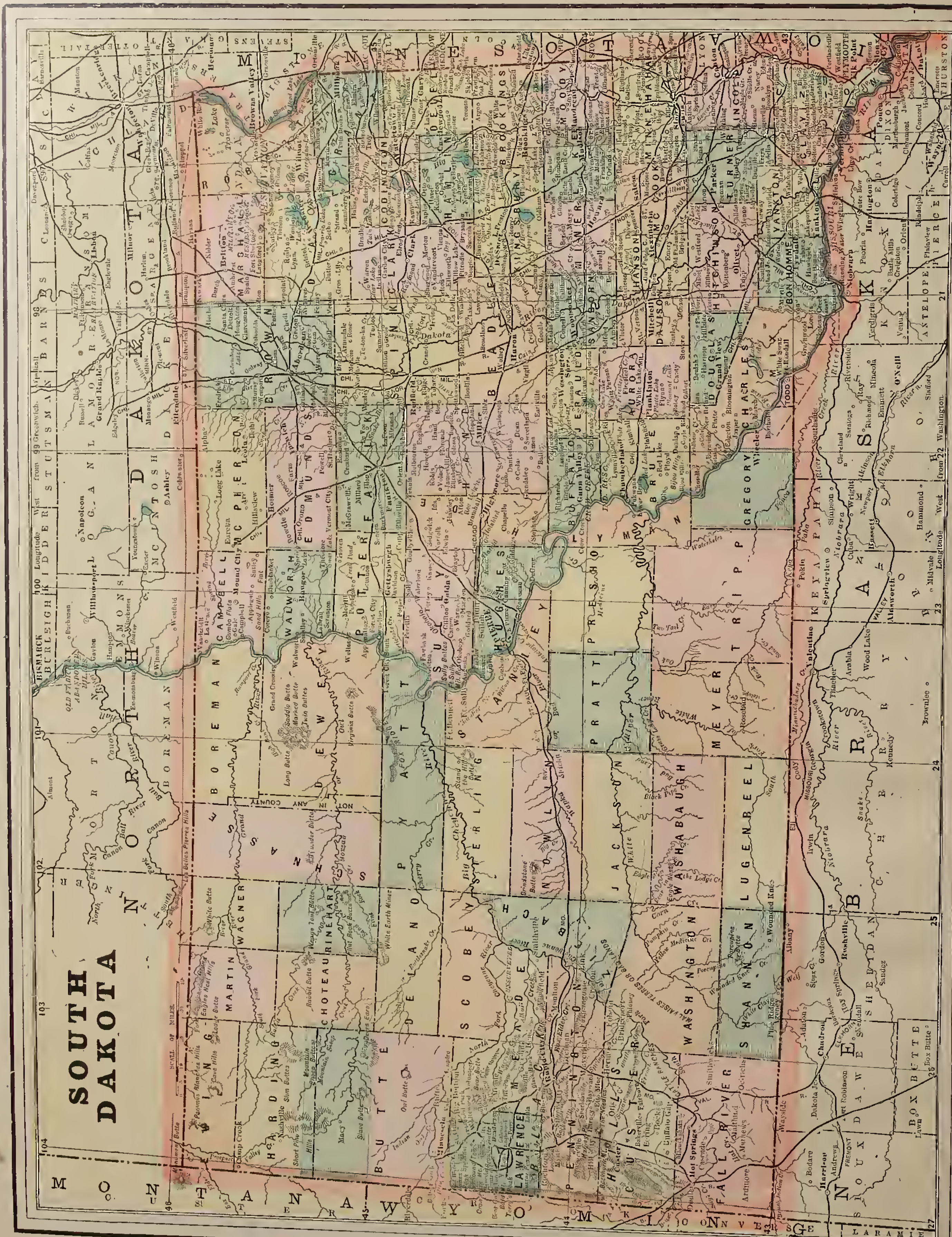

ARKANSAS
SCALE OF MILES
MISSOURI
TENNESSEE
MISSISSIPPI
LOUISIANA
TEXAS
INDIAN TERRITORY
KY.
LITTLE ROCK

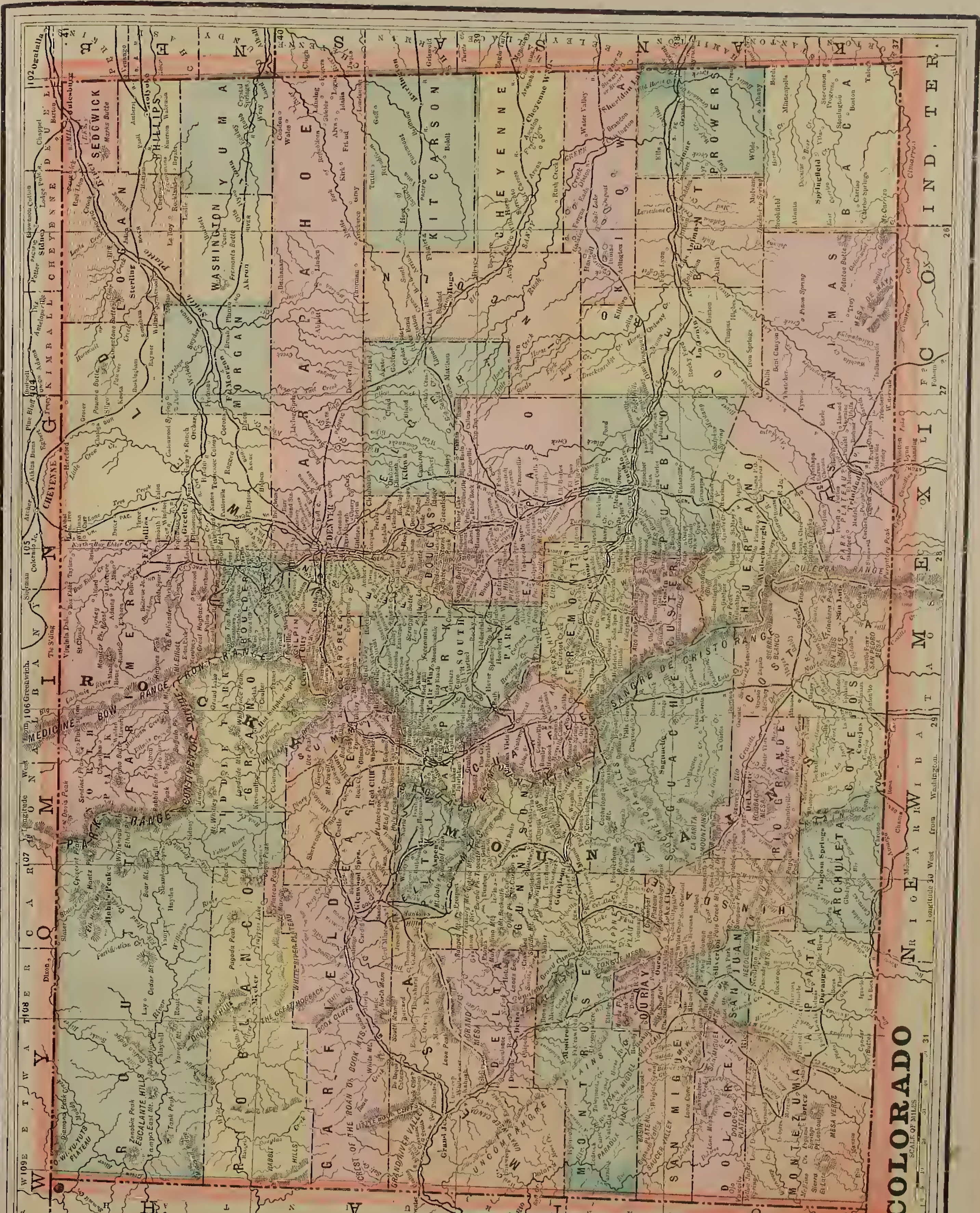

NEBRASKA
SCALE OF MILES
0 10 20 30 40 50 60
SOUTH DAKOTA
IOWA
KANSAS
COLORADO
WYOMING
MISSOURI


OMAHA
MISSOURI RIVER
CUT OFF LAKE
FLORENCE LAKE
Union Stock Yards
Council Bluffs & Omaha Bridge
Catholic Cemetery of Holy Sepulchre
Bohemian Cem.
Hanscom Park
Hickory Park
Fort Omaha
State Mute Institute
Miltons Square
Druid Hill Depot
West Lawn Station
Powder Magazine
Water Works
Fremont
Elkhorn
Belt
County Road
Military Boulevard
Cuming
Dodge
Douglas
Farnam
Harney
Howard
Leavenworth
St. Marys Ave.
Pierce
Hamilton
Sherman Ave.
Q St.
Archer St.
Beemer
Perry
Willow
Boulevard
Keystone St.

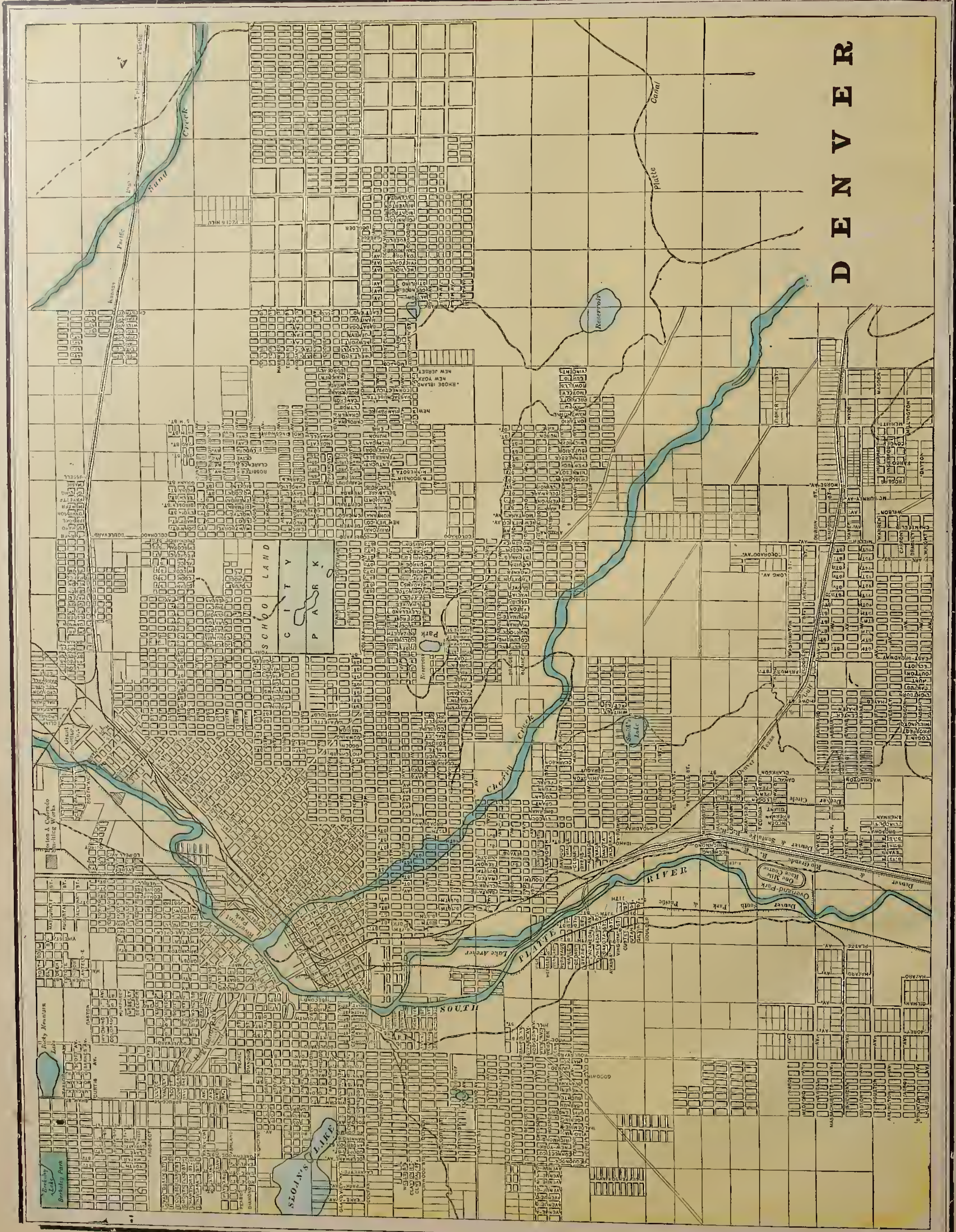

KANSAS
SCALE OF MILES
0 5 10 20 30 40 50 60
NEBRASKA
MISSOURI
INDIAN TERRITORY
OKLAHOMA
TEXAS
CHEYENNE
RAWLINS
DECATUR
NORTON
PHILLIPS
SMITH
JEWELL
REPUBLIC
WASHINGTON
MARSHALL
NEMAHA
BROWN
DONIPHAN
ATCHISON
JEFFERSON
JACKSON
POTTAWATOMIE
RILEY
CLAY
CLOUD
MITCHELL
OSBORNE
ROOKS
GRAHAM
SHERIDAN
THOMAS
SHERMAN
WALLACE
LOGAN
GOVE
TREGO
ELLIS
RUSSELL
LINCOLN
OTTAWA
DICKINSON
GEARY
WABAUNSEE
SHAWNEE
DOUGLAS
JOHNSON
WYANDOTTE
LEAVENWORTH
MIAMI
FRANKLIN
OSAGE
LYON
MORRIS
MARION
McPHERSON
SALINE
ELLSWORTH
RICE
BARTON
RUSH
NESS
LANE
SCOTT
WICHITA
GREELEY
HAMILTON
KEARNEY
FINNEY
GARFIELD
HODGEMAN
PAWNEE
STAFFORD
RENO
HARVEY
BUTLER
CHASE
GREENWOOD
COFFEY
ANDERSON
LINN
BOURBON
ALLEN
WOODSON
WILSON
NEOSHO
CRAWFORD
CHEROKEE
LABETTE
MONTGOMERY
CHAUTAUQUA
ELK
COWLEY
SUMNER
SEDGWICK
KINGMAN
HARPER
BARBER
PRATT
KIOWA
COMANCHE
CLARK
FORD
EDWARDS
GRAY
MEADE
SEWARD
HASKELL
GRANT
STANTON
MORTON
STEVENS

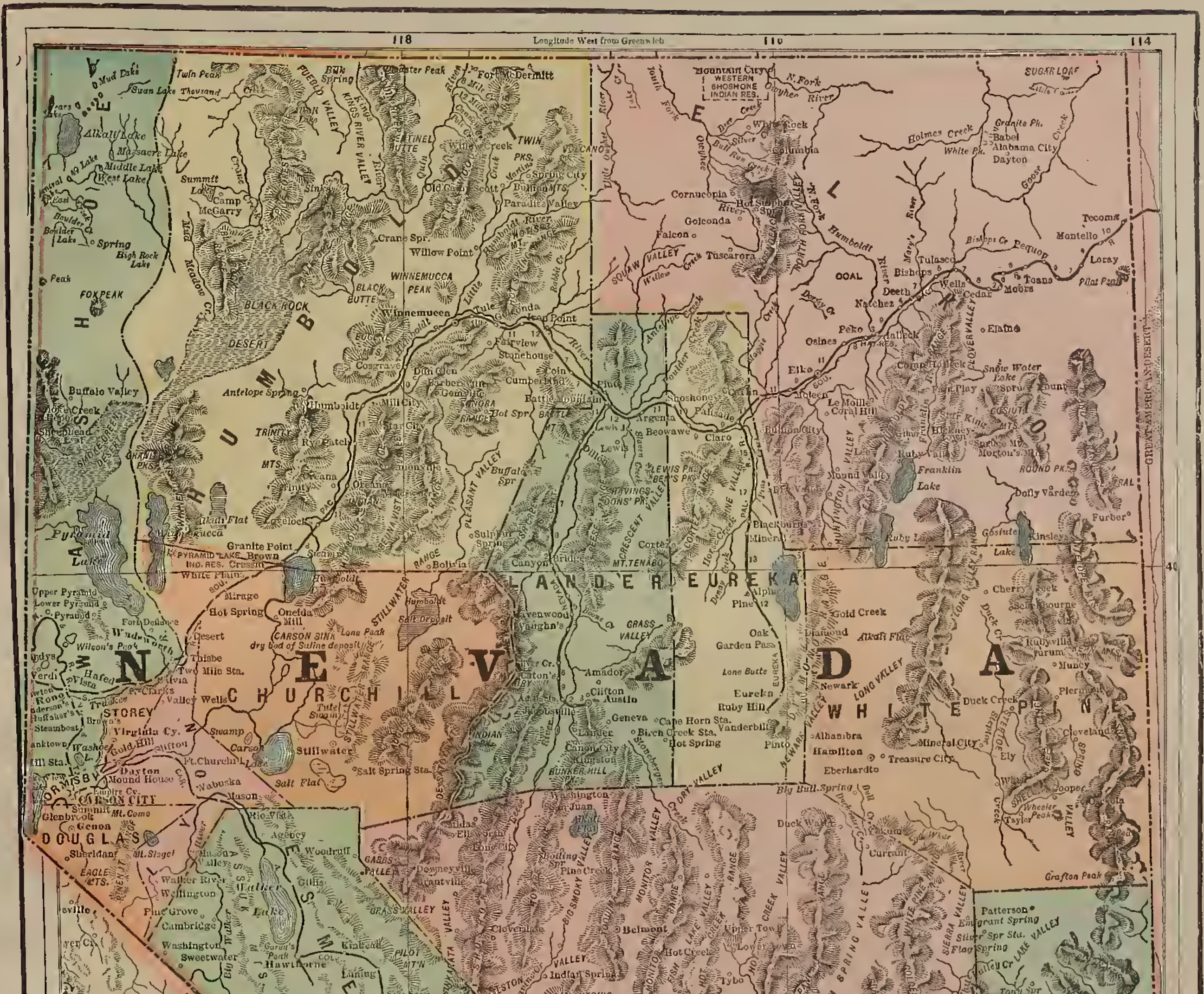

NORTH DAKOTA
SCALE OF MILES
0 5 10 20 30 40 50
MANITOBA
NORTH WEST TERRITORY
MINNESOTA
MONTANA
SOUTH DAKOTA
PEMBINA
CAVALIER
ROLETTE
BOTTINEAU
RENVILLE
WARD
MOUNTRAILL
FLANNERY
BUFORD
ALFRED WALLACE
McKENZIE
GARFIELD
BILLINGS
STARK
HETTINGER
BOWMAN
DUNN
MORTON
OLIVER
MERCER
McLEAN
WILLIAMS
STEVENS
CHURCH
McHENRY
PIERCE
TOWNER
BENSON
RAMSEY
NELSON
WALSH
GRAND FORKS
TRAILL
STEELE
GRIGGS
FOSTER
EDDY
WELLS
SHERIDAN
KIDDER
STUTSMAN
BARNES
CASS
RANSOM
RICHLAND
SARGENT
DICKEY
LA MOURE
LOGAN
McINTOSH
EMMONS
BURLEIGH
BOREMAN
BISMARCK
Fargo
Jamestown
Grand Forks
Devil's Lake
Mandan
MISSOURI
Longitude West from Greenwich
Longitude West from Washington


SOUTH DAKOTA
NORTH DAKOTA
MINNESOTA
IOWA
NEBRASKA
MONTANA
WYOMING
SCALE OF MILES
Longitude West from Greenwich

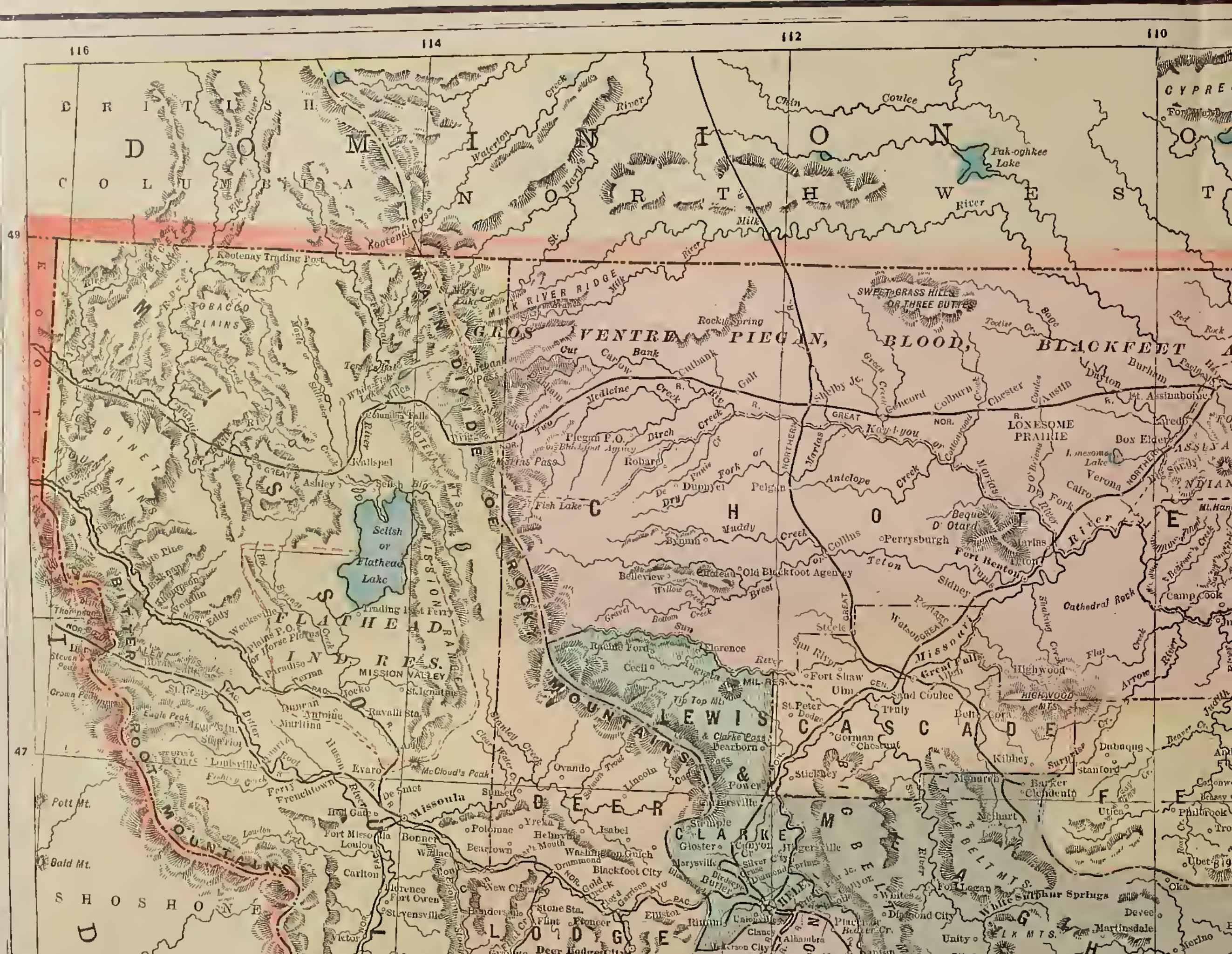

COLORADO

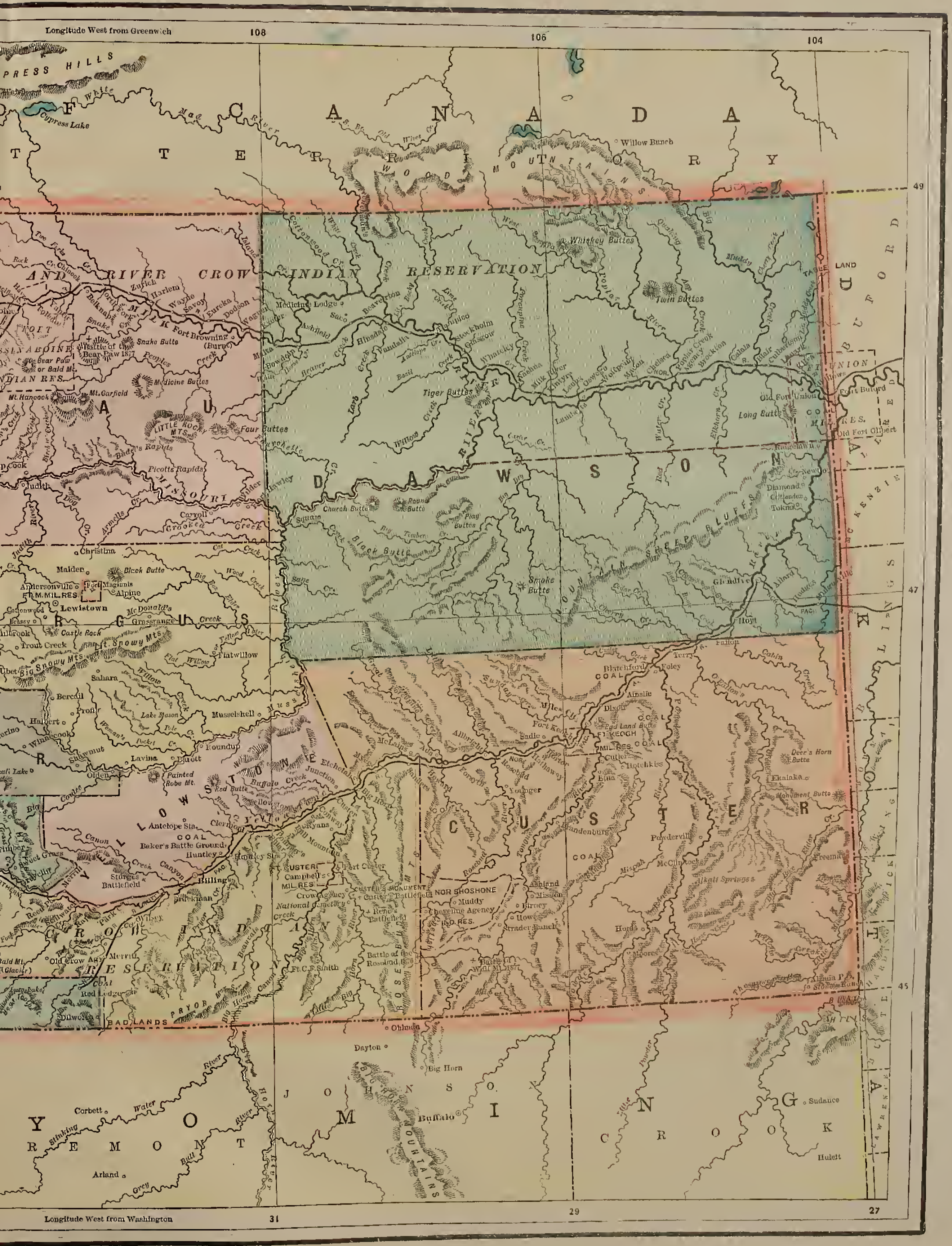
SCALE OF MILES
W Y O M I N G
N E B R A S K A
K A N S A S
N E W M E X I C O
IND. TER.
U T A H
Longitude 30 West from Washington
Longitude West from 106 Greenwich
SEDGWICK
PHILLIPS
LOGAN
WASHINGTON
YUMA
MORGAN
WELD
LARIMER
BOULDER
GILPIN
CLEAR CREEK
JEFFERSON
ARAPAHOE
DENVER
DOUGLAS
ELBERT
KIT CARSON
CHEYENNE
LINCOLN
EL PASO
KIOWA
BENT
PROWERS
OTERO
PUEBLO
LAS ANIMAS
HUERFANO
CUSTER
FREMONT
PARK
SUMMIT
LAKE
CHAFFEE
SAGUACHE
COSTILLA
CONEJOS
RIO GRANDE
ARCHULETA
MINERAL
HINSDALE
SAN JUAN
LA PLATA
MONTEZUMA
DOLORES
SAN MIGUEL
OURAY
MONTROSE
DELTA
GUNNISON
PITKIN
EAGLE
GARFIELD
MESA
ROUTT
RIO BLANCO
GRAND
BACA
MEDICINE BOW RANGE
PARK RANGE
FRONT RANGE
SANGRE DE CRISTO RANGE
CULEBRA RANGE
SAN JUAN MOUNTAINS
LA GARITA MOUNTAINS
BOOK CLIFFS
ROAN OR BOOK MTS.
UNCOMPAHGRE PLATEAU
GRAND MESA
MESA VERDE
ESCALANTE HILLS
WHITE RIVER PLATEAU
THE GREAT HOGBACK
MESA DE MAYA
Denver
Pueblo
Colorado Springs
Leadville
Greeley
Sterling
Julesburg
Trinidad
Walsenburg
Canon City
Gunnison
Aspen
Glenwood Sprs.
Grand Junction
Montrose
Ouray
Silverton
Durango
Del Norte
Alamosa
La Junta
Lamar
Las Animas
Pikes Peak
Longs Peak
Platte River
Arkansas River
Rio Grande
Grand River
Gunnison River
Dolores River
White River
Yampa River

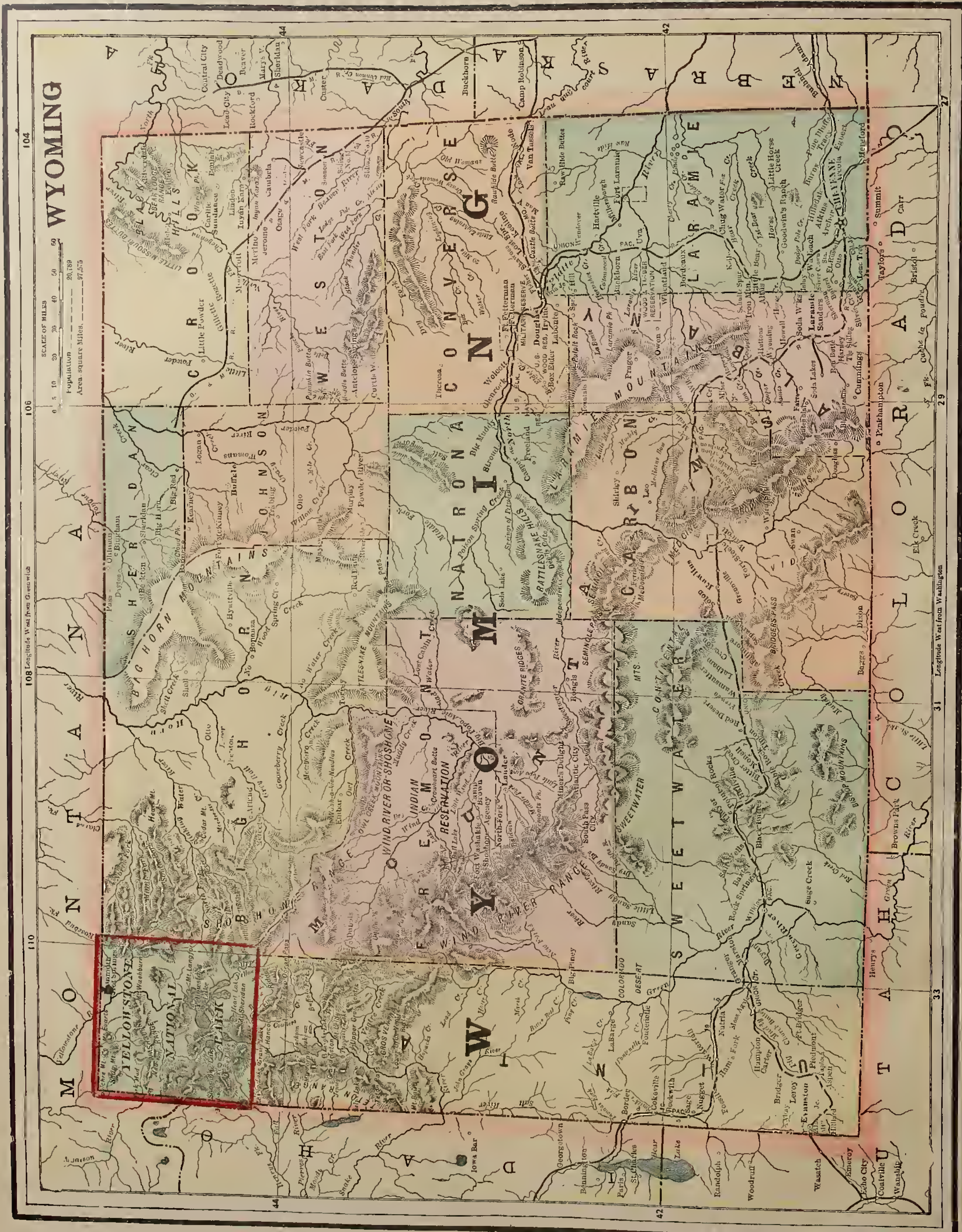

DENVER
CITY PARK
SCHOOL LAND
Park
Reservoir
Reservoir
Platte Canal
Sand Creek
Kansas Pacific
Union Pacific
Cherry Creek
Smith's Lake
SOUTH PLATTE RIVER
Lake Archer
Riverfront Park
Overland Park
One Mile Race Course
Denver & Rio Grande R.R.
Denver & Santa Fe
Denver South Park & Pacific
Denver Texas & Gulf
Denver Circle
Boston & Colorado Smelting Works
Grant Smelting Works
SLOAN'S LAKE
Rocky Mountain Lake
Berkeley Lake
Berkeley Park



NEVADA
Longitude West from Greenwich
Longitude West from Washington
118
116
114
40
38
37
39
HUMBOLDT
ELKO
LANDER
EUREKA
WHITE PINE
CHURCHILL
STOREY
WASHOE
ORMSBY
DOUGLAS
ESMERALDA
NYE
LINCOLN
CALIFORNIA
ARIZ.
Carson City
Virginia Cy.
Reno
Winnemucca
Elko
Eureka
Austin
Hamilton
Ely
Pioche
Belmont
Tybo
Hawthorne
Aurora
Candelaria
Columbus
Wells
Tuscarora
Golconda
Battle Mountain
Palisade
Carlin
Pyramid Lake
Walker Lake
Carson Sink
Humboldt
Ruby Lake
Franklin Lake
Mono Lake
BLACK ROCK DESERT
RALSTON DESERT
Fort McDermitt
Western Shoshone Indian Res.
Pyramid Lake Ind. Res.
Moapa River Indian Reserve
Great American Desert
Mountain City
Tecoma
Toano
Mineral City
Treasure City
Cherry Creek
Osceola
Patterson
Panaca
Clover Valley
St. Joseph
St. Thomas
Mormon Well
Ash Meadows
Buckskin Range
Vegas Wash
El Dorado Canyon
El Dorado City
Ivanpah
Resting Spr.
Soda Lake
Piute Spr.
Mineral Park
Alexandria
Colorado R.
Bodie
Bridgeport
Benton
Yo Semite
SCALE OF MILES
0 10 20 30 40
Population ... 62,266
Area, square Miles ... 109,740

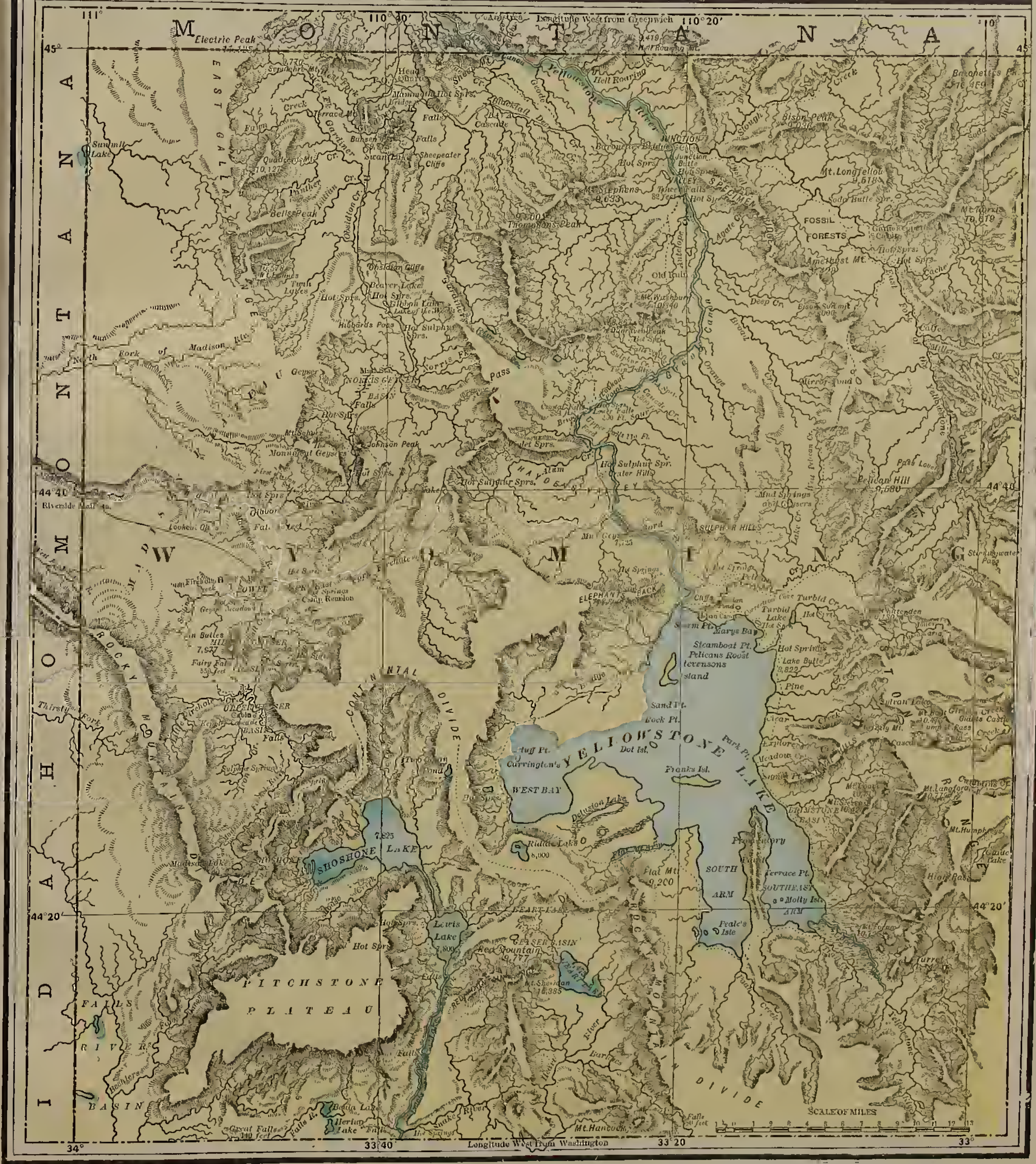

MONTANA
Scale of Miles
0 5 10 20 30 40 50
116
114
112
110
49
47
45
37
35
33
BRITISH COLUMBIA
DOMINION
NORTH WEST
IDAHO
SHOSHONE
WYOMING
BITTER ROOT MOUNTAINS
ROCKY MOUNTAINS
MAIN DIVIDE OF ROCKY MOUNTAINS
FLATHEAD IND. RES.
GROS VENTRE, PIEGAN, BLOOD, BLACKFEET
CHOTEAU
MISSOULA
DEER LODGE
LEWIS & CLARKE
JEFFERSON
SILVER BOW
BEAVERHEAD
MADISON
GALLATIN
MEAGHER
CASCADE
PARK
YELLOWSTONE NATIONAL PARK
Selish or Flathead Lake
Helena
Butte City
Missoula
Great Falls
Fort Benton
Deer Lodge City
Dillon
Virginia City
Bozeman
Livingston
Salmon City
ALTURAS
CYPRE
Chin Coulee
Pak-oghkee Lake
Milk River
Kootenay Pass
Kootenay Trading Post
TOBACCO PLAINS
CABINET MOUNTAINS
Kalispell
Ashley
Demersville
MILK RIVER RIDGE
SWEET GRASS HILLS OR THREE BUTTES
Rock Spring
Cut Bank
Two Medicine Creek
Shelby Jc.
Kay-l-you
LONESOME PRAIRIE
Box Elder
Verona
Fort Assinaboine
Piegan P.O. or Blackfoot Agency
Robare
Birch Creek
Dupuyer
Pelgan
Marias Pass
Fish Lake
Dry Fork of Marias
Muddy Creek
Teton
Collins
Perrysburgh
Old Blackfoot Agency
Belleview
Choteau
Fort Benton
Sidney
Cathedral Rock
Sun River
Fort Shaw
Ulm
Great Falls
Sand Coulee
Belt
Highwood
HIGHWOOD MTS.
Steele
Watson
Missouri
Florence
Cecil
St. Peter
Gorman
Chestnut
Kibbey
Dubuque
Stanford
Utica
Barker
Clendenin
Stickney
Dearborn
Power
Marysville
Canyon Creek
Gloster
Silver City
Unionville
Clancy
Alhambra
Jefferson City
Corbin
Wickes
Comet
Basin
Boulder
Boulder Valley
Radersburgh
Painted Rock
Bedford
Townsend
St. Louis
Toston
White Sulphur Springs
LITTLE BELT MTS.
Diamond City
Fort Logan
Unity
Elk Peak
Martinsdale
CRAZY MTS.
Big Timber
Thompson
Horse Plains
Plains P.O.
Weeksville
Paradise
Perma
Mission Valley
St. Ignatius
Ravalli Sta.
Arlee
Duncan
Evaro
Frenchtown
De Smet
Missoula
Fort Missoula
Loulou
Bonner
Carlton
Florence
Fort Owen
Stevensville
Victor
Corvallis
Grantsdale
Como
Ross Hole
Ovando
Lincoln
Sunset
Yreka
Helmville
Isabel
Drummond
Washington Gulch
Blackfoot City
New Chicago
Stone Sta.
Flint
Granite
Philipsburgh
Rumsey
Cable
Georgetown
Anaconda
Mill Creek
Race Track
Warm Springs
Butte City
Woodville
Pipestone
Whitehall
Cold Spring
Willow Cr.
Three Forks
Gallatin
Manhattan
Central Park
Bozeman
Fort Ellis
Belgrade
Hot Springs
Livingston
Chicory
Fridley
Emigrant
Gardiner
Cinnabar
Mammoth Hot Springs
Yellowstone Lake
Heart Lake
Shoshone Lake
Hayden's Valley
Wisdom
Battle of Big Hole, 1877
Divide
Melrose
Glendale
Dewey
Twin Bridges
Sheridan
Laurin
Alder
Nevada
Virginia City
Ruby Mts.
Pony
Norris
Harrison
Red Bluff
Ennis
Meadow Creek
Madison
Argenta
Bannack City
Dillon
Apex
Glen
Dell
Lima
Red Rock
Grayling
Daly's
Horse Prairie
Junction
Spring Mountain
Beaver
High Bridge
Henry Lake
Elk City
Florence
Gibbonsville
Washington
Pott Mt.
Bald Mt.
Salmon River
Lemhi


Longitude West from Greenwich
108
106
104
49
47
45
CYPRESS HILLS
Cypress Lake
White
Mud
River
C A N A D A
T E R R I T O R Y
Willow Bunch
WOOD MOUNTAINS
Frenchman
Whiskey Buttes
Twin Buttes
Big Muddy
INDIAN RESERVATION
RIVER CROW
Chinook
Zurich
Harlem
Wayne
Savoy
Eureka
Dodson
Fort Belknap
MILK
Fort Browning (Burns)
Wagner
Malta
Bowdoin
Medicine Lodge
Saco
Ashfield
Beaverton
Hinsdale
Vandalia
Tampico
Stockholm
Glasgow
Whatley
Nashua
Milk River
Porcupine Creek
Poplar
Oswego
Wolfpoint
Chelsea
Poplar Creek
Brockton
Culbertson
Blair
Bainville
Old Fort Union
Fort Buford
Long Butte
Snake Butte
Battle of the Bear Paw 1877
Bear Paw or Bald Mt.
ASSINABOINE
Mt. Garfield
Mt. Hancock
Medicine Buttes
LITTLE ROCKY MTS.
Four Buttes
Tiger Buttes
Basil
Willow Creek
Bird's Rapids
Picotte Rapids
MISSOURI RIVER
Cow Island
Judith
Carroll
Crooked Creek
Armells Cr.
Christina
Maiden
Black Butte
Andersonville
Fort Maginnis
Alpine
FT. M. MIL. RES.
Lewistown
Grassrange
McDonald's
Castle Rock
Trout Creek
Snowy Mts.
Big Snowy Mts.
Flatwillow
Sahara
Bercail
Halbert
Winnecook
Lake Mason
Musselshell
Roundup
Lavina
Olden
Painted Robe Mt.
Antelope Sta.
COAL
Baker's Battle Ground
Huntley
Billings
Sturges Battlefield
Old Crow Ag.
Merrill
Red Lodge
Dilworth
BAD LANDS
PRYOR
CROW INDIAN RESERVATION
Ft. C. F. Smith
Battle of the Rosebud 1876
CUSTER
Campbell's
MIL. RES.
Fort Custer
Crow Agency
CUSTER'S MONUMENT Battlefield
Reno's Battlefield
NOR. SHOSHONE
Muddy
Cheyenne Agency
IND. RES.
Birney
Howes
Trader Ranch
Ashland
Mission
DAWSON
Church Butte
Round Butte
Play Buttes
Black Butte
Smoke Butte
Squaw
Big Timber Cr.
BAD LANDS
BLUFFS
MOUNTAIN SHEEP BLUFFS
Cedar Cr.
Glendive
Allard
Hoyt
Fallon
Terry
Blatchford
Foley
Ainslie
Dixon
Fort Keogh
Bad Land Butte
FT. KEOGH MIL. RES.
Miles City
Sadie
Culloo
Hotchkiss
Etna
YELLOWSTONE
Etchetah
Junction
Forsyth
Rosebud
Hathaway
Younger
Allbright
McLains
Big Horn
Ryans
Brandenburg
Powderville
McClintock
Alkali Springs
Deer's Horn Butte
Ekalaka
Monument Butte
Freeman
Horse Creek
Hanks
Moores
Albion P.O.
Stoneville
CUSTER
Powder River
Little Missouri
Tongue River
Rosebud
Mizpah
Cabin Creek
O'Fallon's Creek
Box Elder
Beaver Creek
Ft. UNION
COAL MINES
Old Fort Gilbert
BUFORD
McKENZIE
BILLINGS
STARK
HETTINGER
LAWRENCE
DAKOTA
Newlon
Diamond
Crittenden
Tokna
TABLE LAND
Ohlman
Dayton
Big Horn
Buffalo
JOHNSON
BIG HORN MOUNTAINS
CROOK
Sundance
Hulett
WYOMING
FREMONT
Corbett
Arland
Stinking Water
Grey Bull
Little Powder
Longitude West from Washington
31
29
27

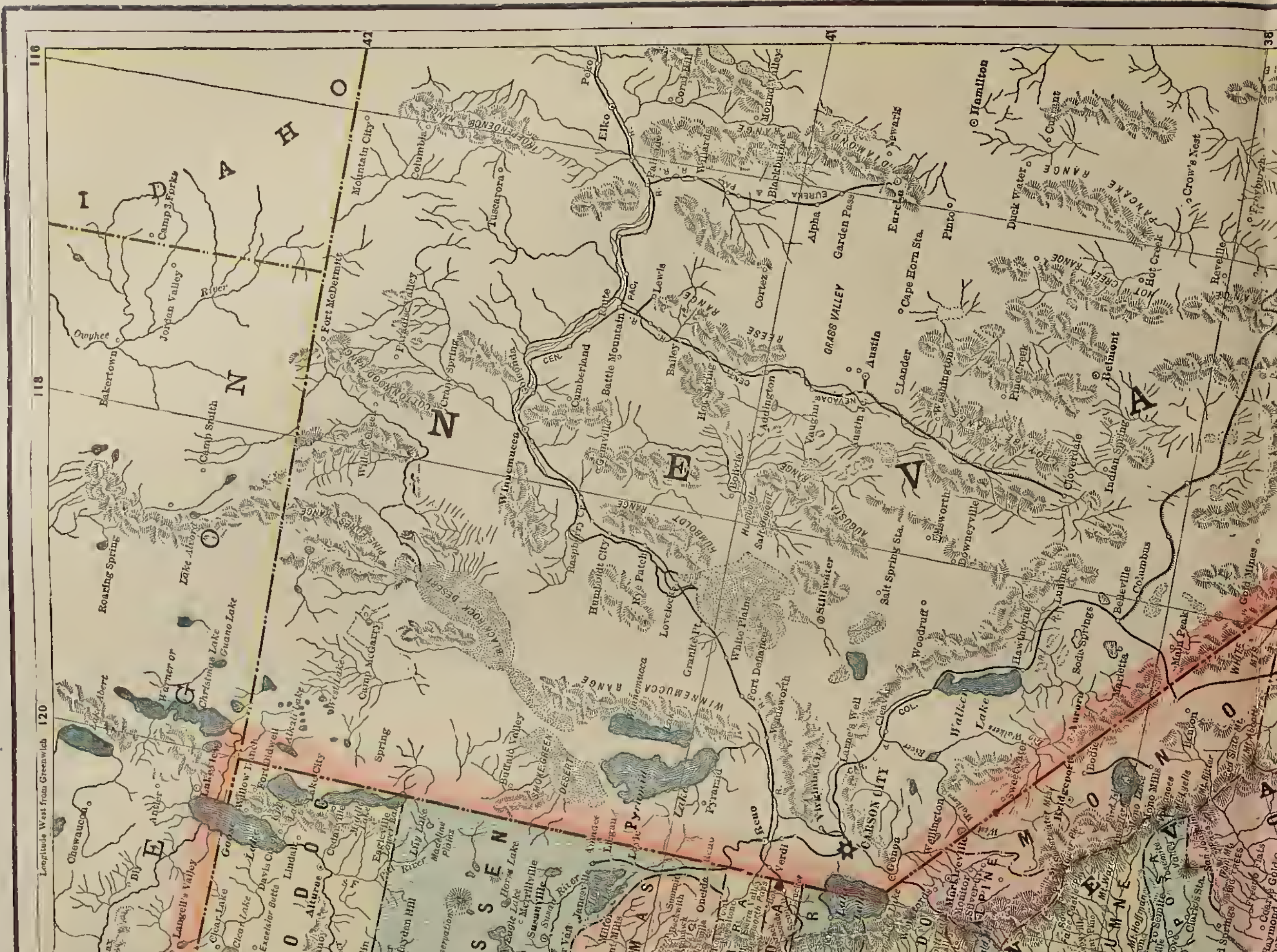

WYOMING
SCALE OF MILES
0 5 10 20 30 40 50 60
Population 20,789
Area, square Miles 97,575
Longitude West from Greenwich
Longitude West from Washington
104
106
108
110
27
29
31
33
44
42
MONTANA
DAKOTA
NEBRASKA
COLORADO
UTAH
IDAHO
CROOK
WESTON
CONVERSE
LARAMIE
ALBANY
CARBON
SWEETWATER
UINTA
FREMONT
NATRONA
JOHNSON
SHERIDAN
BIG HORN
YELLOWSTONE NATIONAL PARK
WIND RIVER OR SHOSHONE INDIAN RESERVATION
BIG HORN MOUNTAINS
WIND RIVER RANGE
LARAMIE MOUNTAINS
RATTLESNAKE HILLS
GRANITE RIDGES
SEMINOLE MTS.
SHOSHONE RANGE
BLACK HILLS
COLORADO DESERT
MILITARY RESERVE
Cheyenne
Laramie
Rawlins
Rock Springs
Evanston
Lander
Buffalo
Sheridan
Douglas
Casper
Sundance
Newcastle
Green River
South Pass City
Atlantic City
Fort Washakie
Fort Bridger

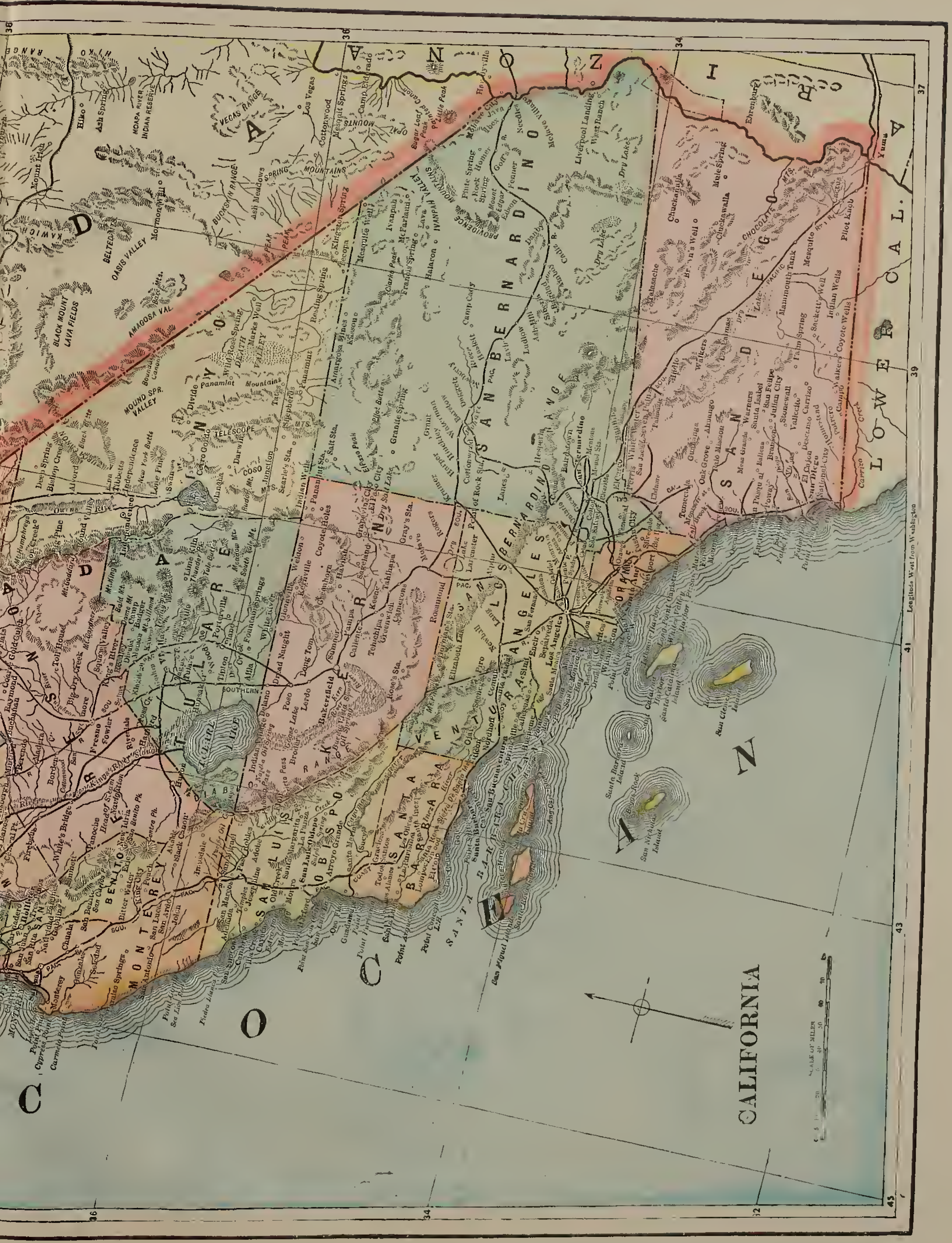
YELLOWSTONE NATIONAL PARK

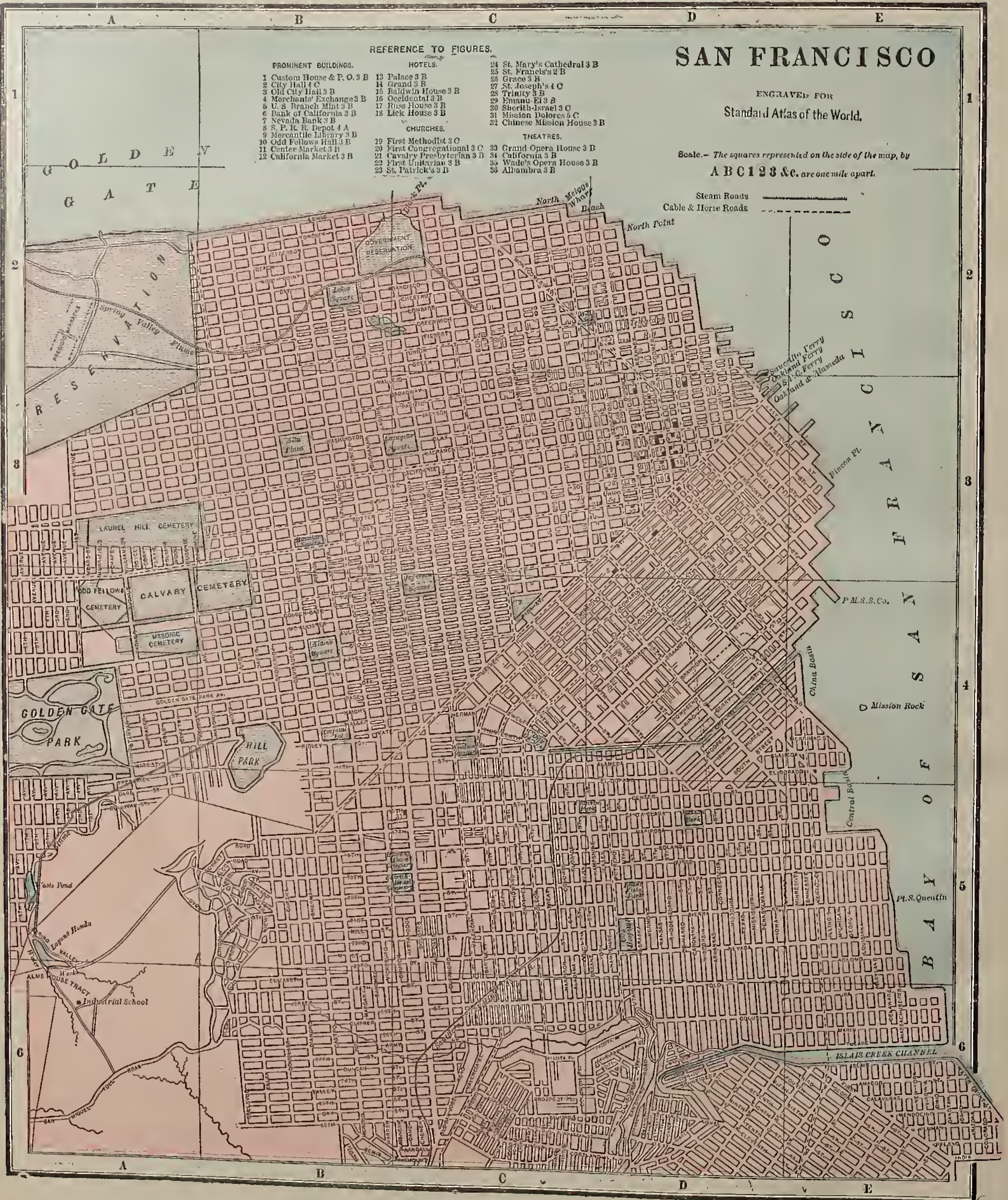
WYOMING



MONTANA
IDAHO
WYOMING
Longitude West from Greenwich
Longitude West from Washington
Electric Peak
Mammoth Hot Sprs.
Yellowstone River
Hell Roaring
Junction Butte
Mt. Washburn
Mt. Stephens
Thompsons Peak
Fossil Forests
Amethyst Mt.
Mt. Norris
Mt. Longfellow
Bison Peak
Obsidian Cliffs
Beaver Lake
Twin Lakes
Bells Peak
Summit Lake
Norris Geyser Basin
Madison River
Johnson Peak
Monument Geysers
Hayden Valley
Sulphur Hills
Pelican Hill
Elephants Back
Steamboat Pt.
Pelicans Roost
Stevensons Island
Sand Pt.
Rock Pt.
Dot Isl.
Franks Isl.
West Bay
Yellowstone Lake
South Arm
Southeast Arm
Molly Isl.
Frank's Isle
Flat Mt.
Riddle Lake
Delusion Lake
Continental Divide
Shoshone Lake
Lewis Lake
Red Mountain
Mt. Sheridan
Heart Lake
Pitchstone Plateau
Falls River Basin
Bechler River
Herlin Lake
Mt. Hancock
Snake River
Mt. Humphreys
Turbid Lake
Absaroka Range
Scale of Miles
45°
44°40'
44°20'
111°
110°40'
110°20'
110°
34°
33°40'
33°20'
33°


IDAHO
OREGON
NEVADA
PACIFIC
Longitude West from Greenwich
116
118
120
122
124
42
41
38
MODOC
SISKIYOU
DEL NORTE
HUMBOLDT
TRINITY
SHASTA
LASSEN
TEHAMA
PLUMAS
SIERRA
BUTTE
GLENN
COLUSA
MENDOCINO
LAKE
SONOMA
NAPA
YOLO
SUTTER
YUBA
NEVADA
PLACER
EL DORADO
SACRAMENTO
SOLANO
MARIN
CONTRA COSTA
ALAMEDA
SAN JOAQUIN
CALAVERAS
AMADOR
ALPINE
TUOLUMNE
STANISLAUS
MONO
SAN FRANCISCO
SAN MATEO
SANTA CLARA
CARSON CITY
SACRAMENTO
Reno
Winnemucca
Elko
Austin
Eureka
Belmont
Hamilton
Virginia City


CALIFORNIA
SCALE OF MILES
Longitude West from Washington
LOWER CAL.
SAN BERNARDINO
LOS ANGELES
SAN DIEGO
KERN
TULARE
SAN LUIS OBISPO
SANTA BARBARA
VENTURA
ORANGE
MONTEREY
SAN BENITO
FRESNO
INYO
Los Angeles
San Diego
San Bernardino
Bakersfield
Fresno
Santa Barbara
Monterey
Yuma
San Clemente Island
Santa Catalina Island
San Nicolas Island


A
B
C
D
E
1
2
3
4
5
6
GOLDEN GATE
RESERVATION
Spring Valley Flume
Presidio Barracks
Black Pt.
North Meiggs Wharf
Beach
North Point
Government Reservation
Lobos Square
Alta Plaza
Lafayette Square
Hamilton Square
Jefferson Square
Alamo Square
LAUREL HILL CEMETERY
ODD FELLOWS CEMETERY
CALVARY CEMETERY
MASONIC CEMETERY
GOLDEN GATE PARK
GOLDEN GATE PARK AV.
HILL PARK
Saucelito Ferry
Oakland Ferry
S.P.C. Ferry
Oakland & Alameda
Rincon Pt.
P.M.S.S.Co.
China Basin
Mission Rock
Central Basin
Pt. S. Quentin
ISLAIS CREEK CHANNEL
BAY OF SAN FRANCISCO
Lake Pond
Laguna Honda
ALMS HOUSE TRACT
Industrial School
SAN MIGUEL
LEWIS
TONQUIN
FRANCISCO
CHESTNUT
LOMBARD
GREENWICH
FILBERT
UNION
GREEN
VALLEJO
BROADWAY
PACIFIC
JACKSON
WASHINGTON
CLAY
SACRAMENTO
CALIFORNIA
SUTTER
POST
GEARY
O'FARRELL
ELLIS
TURK
GOLDEN GATE
McALLISTER
FULTON
GROVE
HAYES
FELL
OAK
PAGE
HAIGHT
WALLER
HERMAN
RIDLEY
CENTER
EL DORADO
SOUTH STREET
MARIPOSA
NEVADA
SOLANO
COLUS
ELIZABETH
ARMY
VALLEY
INDIA

SAN FRANCISCO

ENGRAVED FOR

Standard Atlas of the World.

Scale.– *The squares represented on the side of the map, by* **A B C 1 2 3 &c.** *are one mile apart.*

Steam Roads

Cable & Horse Roads

REFERENCE TO FIGURES.

PROMINENT BUILDINGS.

1 Custom House & P. O. 3 B
2 City Hall 4 C
3 Old City Hall 3 B
4 Merchants' Exchange 3 B
5 U. S. Branch Mint 3 B
6 Bank of California 3 B
7 Nevada Bank 3 B
8 S. P. R. R. Depot 4 A
9 Mercantile Library 3 B
10 Odd Fellows Hall 3 B
11 Center Market 3 B
12 California Market 3 B

HOTELS.

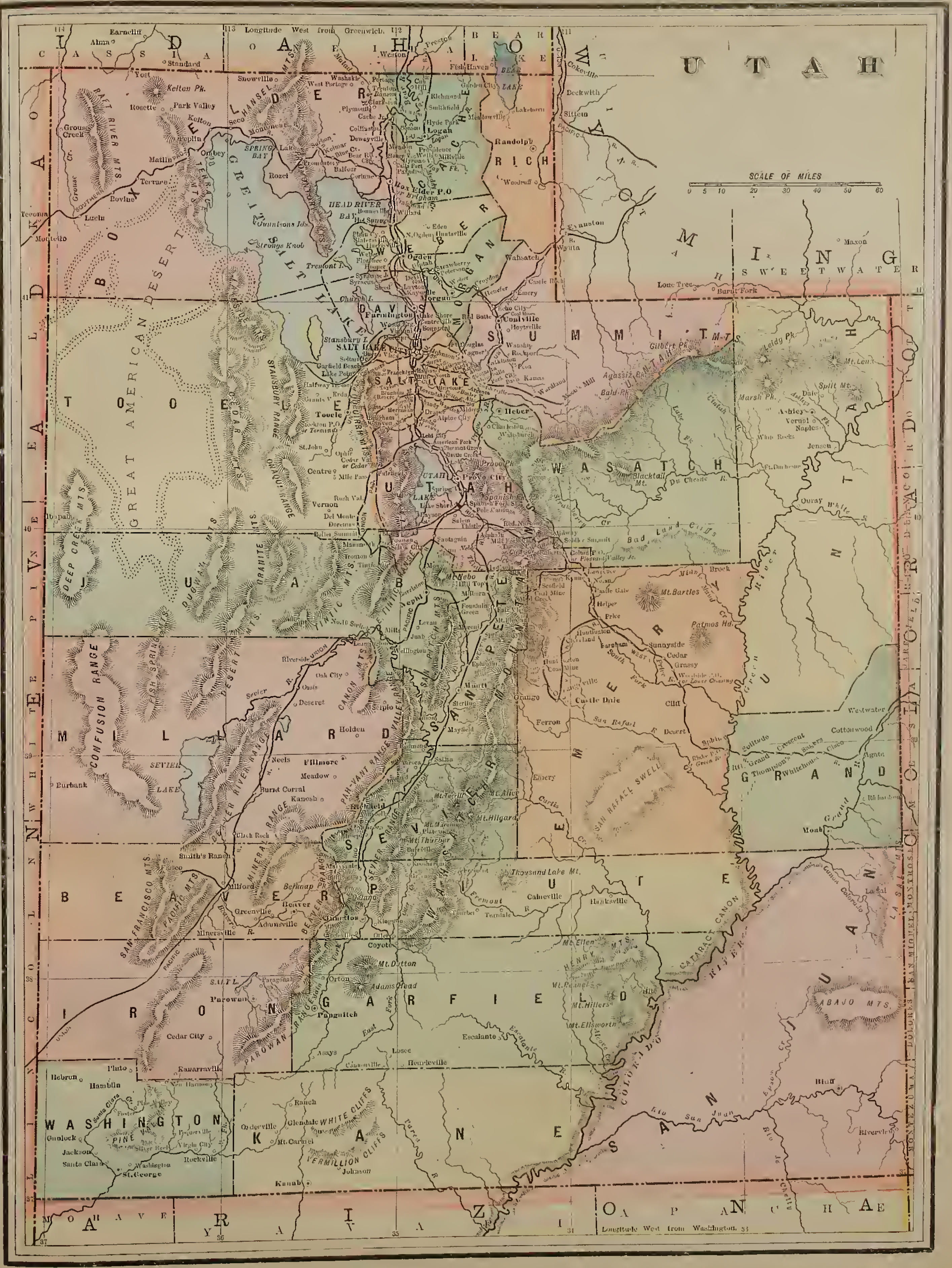
13 Palace 3 B
14 Grand 3 B
15 Baldwin House 3 B
16 Occidental 3 B
17 Russ House 3 B
18 Lick House 3 B

CHURCHES.

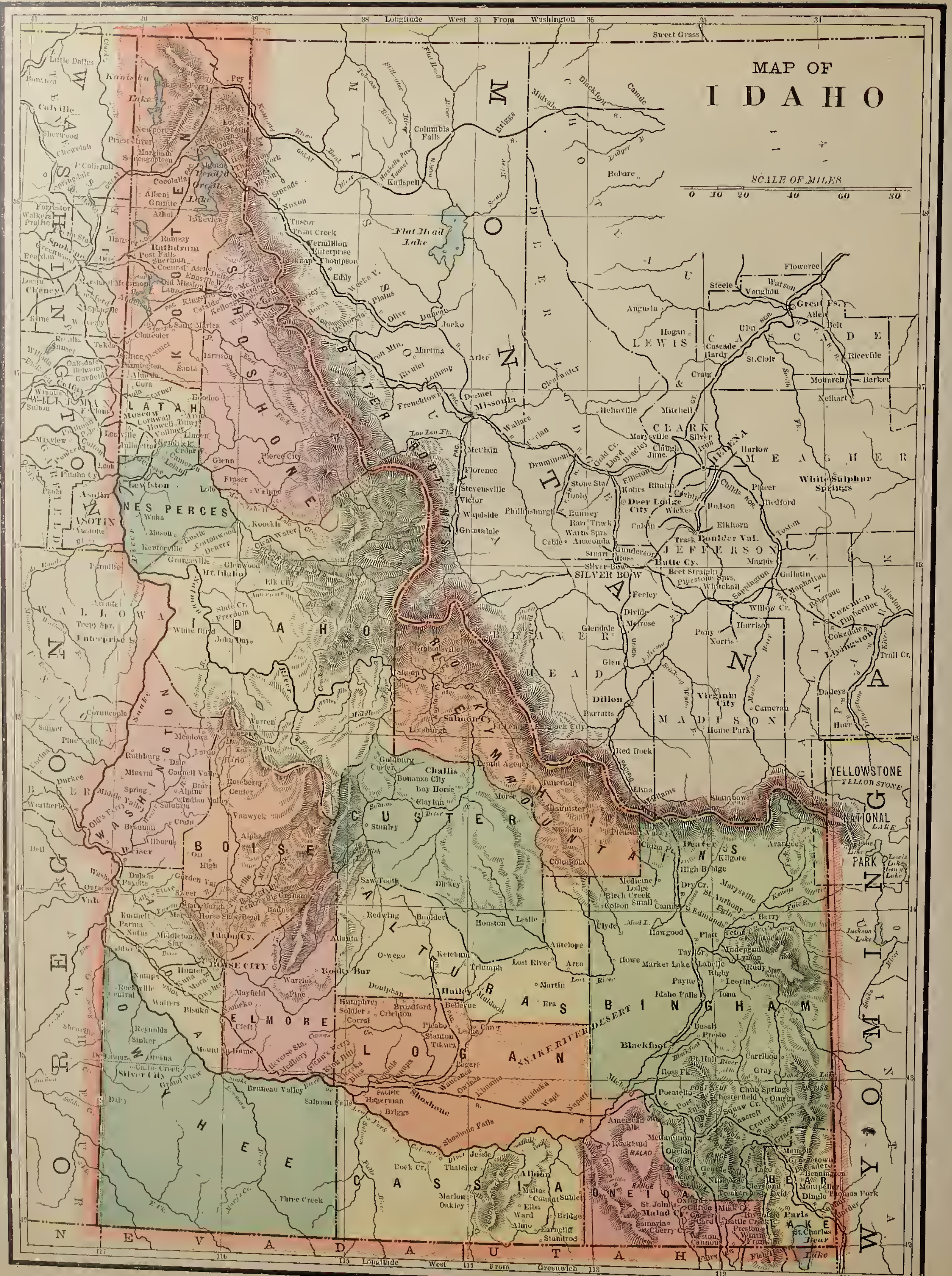
19 First Methodist 3 C
20 First Congregational 3 C
21 Cavalry Presbyterian 3 B
22 First Unitarian 3 B
23 St. Patrick's 3 B
24 St. Mary's Cathedral 3 B
25 St. Francis's 2 B
26 Grace 3 B
27 St. Joseph's 4 C
28 Trinity 3 B
29 Emanu-El 3 B
30 Sherith-Israel 3 C
31 Mission Dolores 5 C
32 Chinese Mission House 3 B

THEATRES.

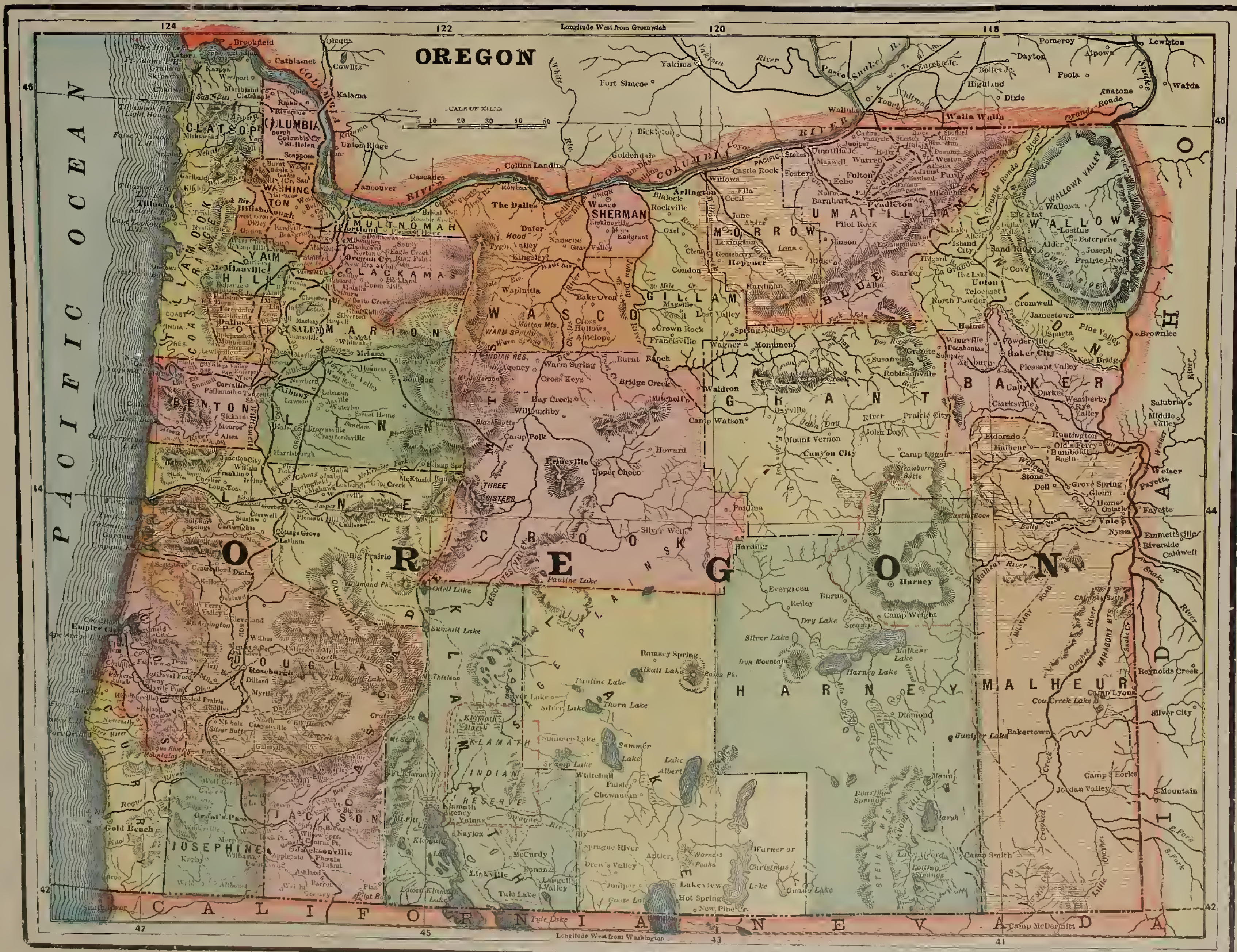
33 Grand Opera House 3 B
34 California 3 B
35 Wade's Opera House 3 B
36 Alhambra 3 B

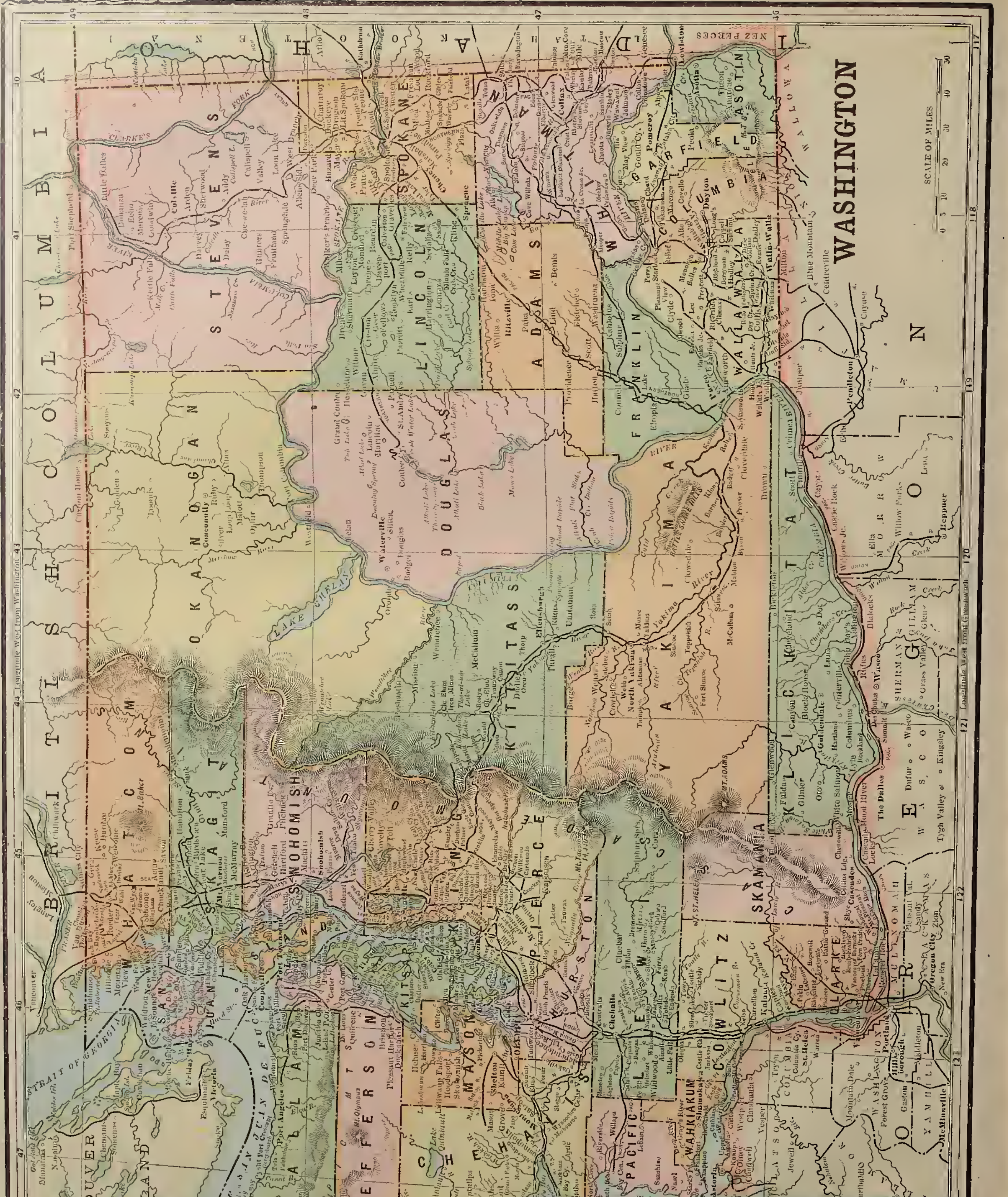

UTAH
SCALE OF MILES
0 5 10 20 30 40 50 60
Longitude West from Greenwich
Longitude West from Washington
IDAHO
CASSIA
OAHEIDA
BEAR LAKE
WYOMING
UINTA
SWEETWATER
NEVADA
ELKO
WHITE PINE
LINCOLN
ARIZONA
MOHAVE
YAVAPAI
COCONINO
APACHE
COLORADO
BOX ELDER
CACHE
RICH
WEBER
MORGAN
DAVIS
SUMMIT
SALT LAKE
TOOELE
UTAH
WASATCH
UINTAH
JUAB
SANPETE
EMERY
GRAND
MILLARD
SEVIER
PIUTE
WAYNE
BEAVER
IRON
GARFIELD
WASHINGTON
KANE
SAN JUAN
GREAT SALT LAKE
GREAT AMERICAN DESERT
UTAH LAKE
SEVIER LAKE
BEAR LAKE
Salt Lake City
Ogden
Provo City
Logan
Tooele
Nephi
Fillmore
Beaver
Parowan
St. George
Manti
Richfield
Moab
Kanab
Panguitch
Heber
Coalville
Farmington
Morgan
Randolph
Ashley
Castle Dale
Loa
Junction
Price
Bluff
Hite
UINTAH MTS.
WASATCH MTS.
HENRY MTS.
ABAJO MTS.
LA SAL MTS.
CONFUSION RANGE
SAN RAFAEL SWELL
WHITE CLIFFS
VERMILLION CLIFFS
Colorado R.
Green River
Grand R.
Rio San Juan
Sevier R.
CATARACT CANON

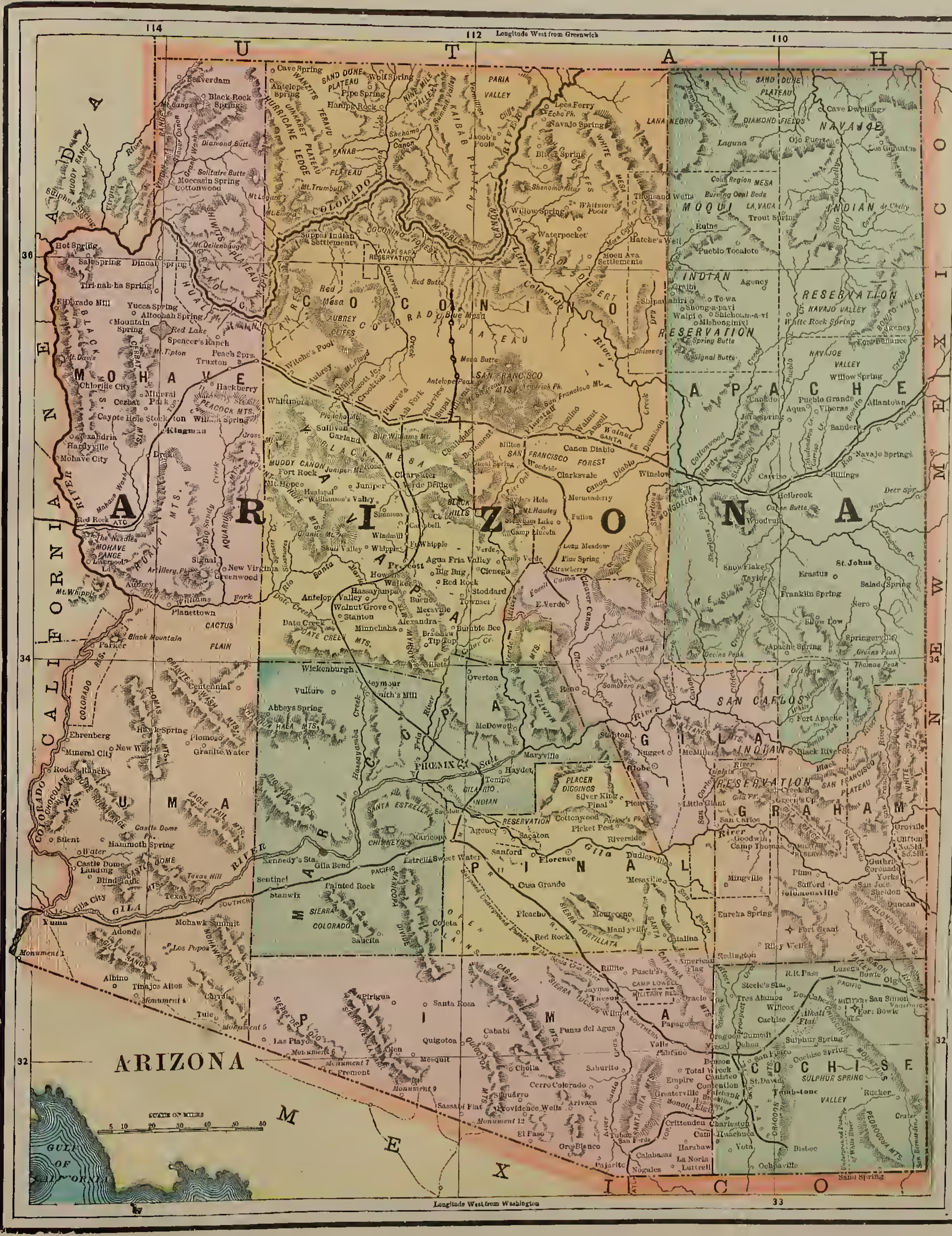
MAP OF IDAHO

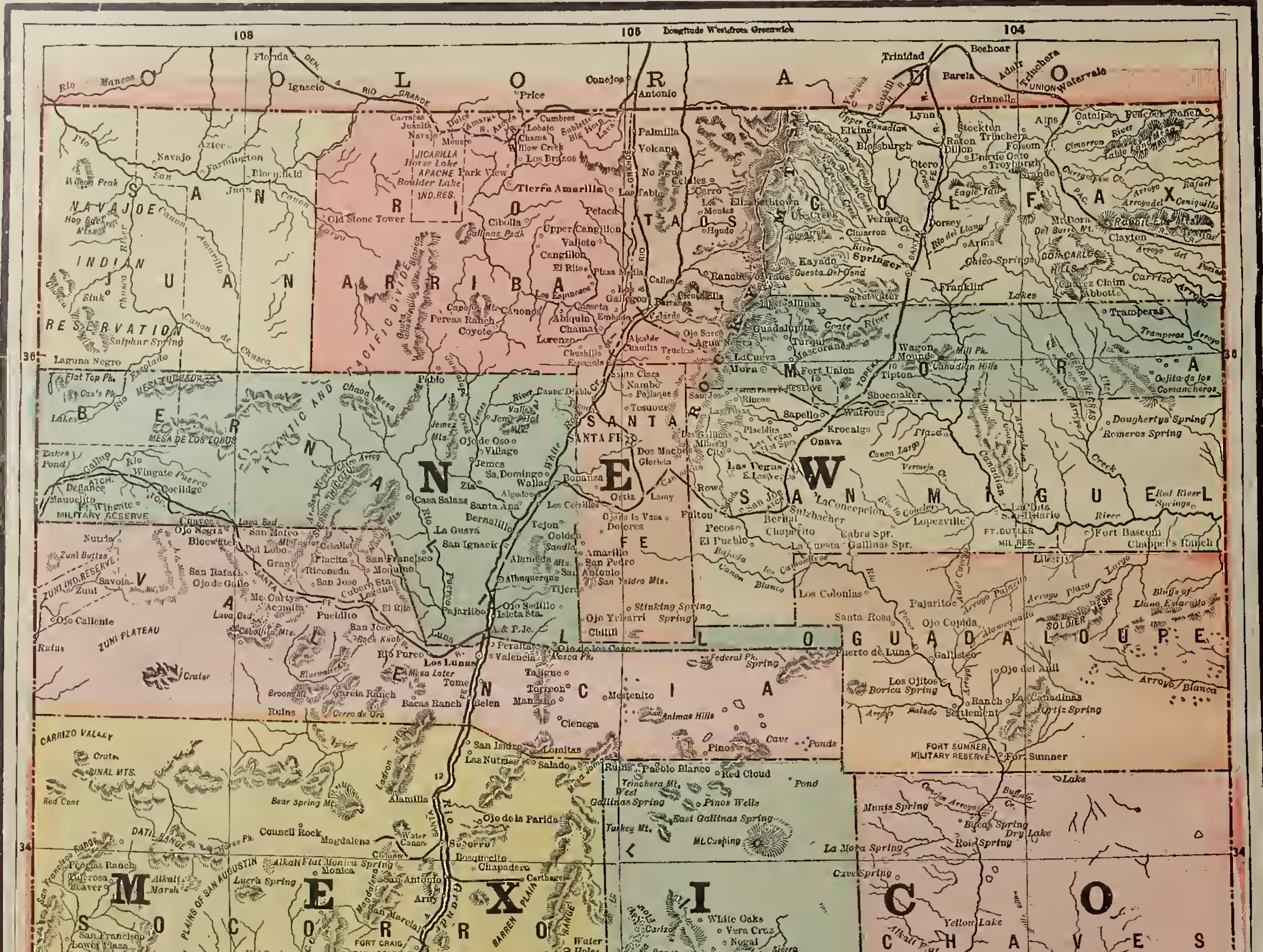


MAP OF IDAHO
SCALE OF MILES
0 10 20 40 60 80
Longitude West 37 From Washington 36 35
Longitude West 114 From Greenwich 113 112 111
MONTANA
WASHINGTON
OREGON
NEVADA
UTAH
WYOMING
YELLOWSTONE NATIONAL PARK
Yellowstone Lake
KOOTENAI
SHOSHONE
LATAH
NES PERCES
IDAHO
WASHINGTON
BOISE
CUSTER
LEMHI
ALTURAS
ELMORE
LOGAN
OWYHEE
CASSIA
ONEIDA
BINGHAM
BEAR LAKE
ASOTIN
WALLOWA
BAKER
MALHEUR
MISSOULA
DEER LODGE
LEWIS & CLARK
MEAGHER
CASCADE
JEFFERSON
SILVER BOW
BEAVER HEAD
MADISON
GALLATIN
PARK
BITTER ROOT MTS.
ROCKY MOUNTAINS
SNAKE RIVER DESERT
Flat Head Lake
Pend Oreille Lake
Kaniska Lake
Bonners Ferry
Sandpoint
Rathdrum
Coeur d'Alene
Wallace
Moscow
Lewiston
Mt. Idaho
Grangeville
Pierce City
Elk City
Salmon Cy.
Challis
Bonanza City
Bay Horse
Clayton
Stanley
Saw Tooth
Ketchum
Hailey
Bellevue
Idaho Cy.
BOISE CITY
Silver City
Mountain Home
Rocky Bar
Shoshone
Hagerman
Albion
Blackfoot
Idaho Falls
Eagle Rock
Pocatello
Ross Fk.
Market Lake
Rexburg
Paris
Montpelier
Malad Cy.
Oxford
Weiser
Payette
Caldwell
Nampa
Soda Sprs.
Missoula
Helena
Butte Cy.
Deer Lodge City
Dillon
Virginia City
Bozeman
Livingston
Great Fs.
Kalispell
Columbia Falls
Spokane
Colville
Cheney
Colfax
Walla Walla
Baker City
Sweet Grass

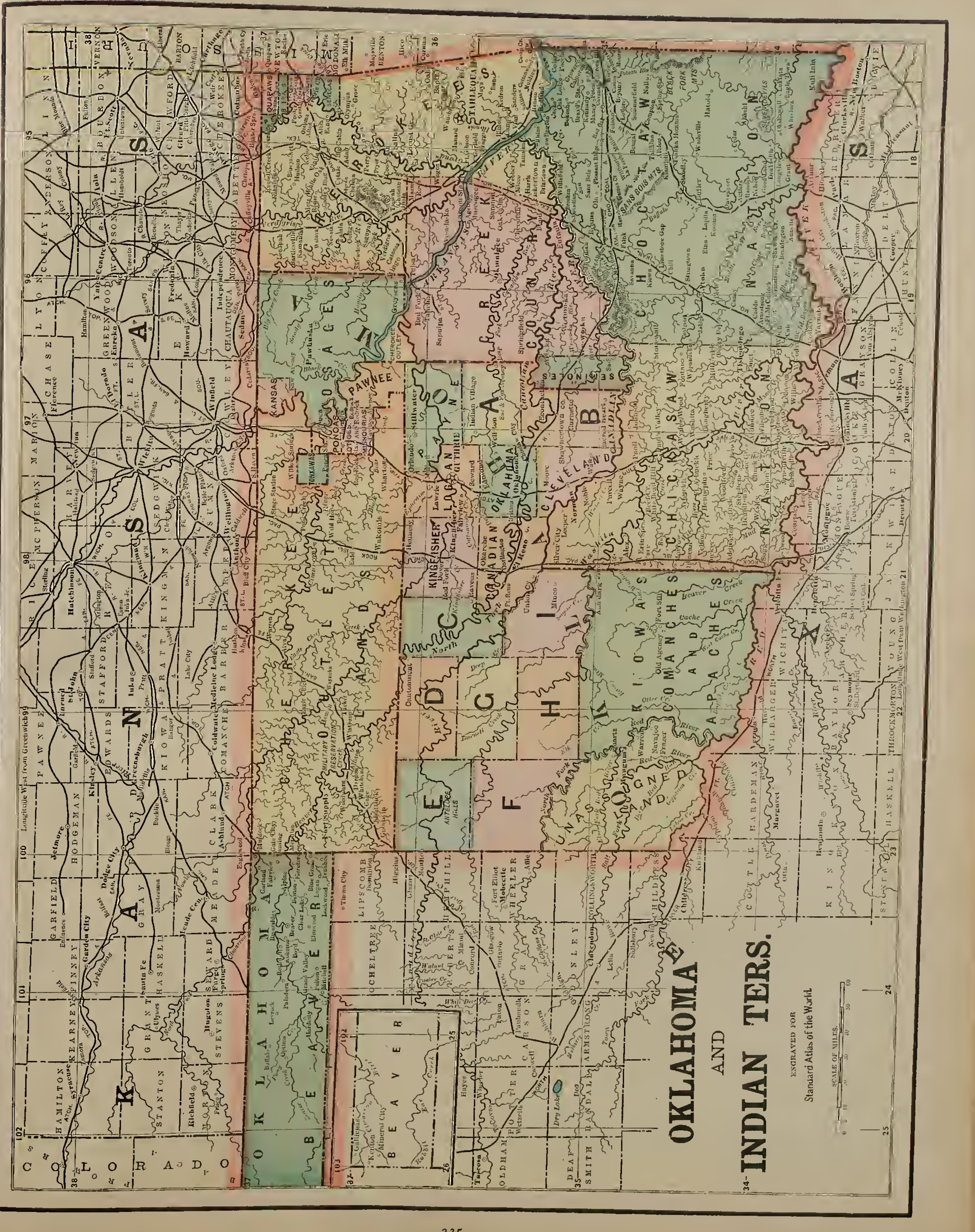

OREGON
SCALE OF MILES
5 10 20 30 40 50
Longitude West from Greenwich
124
122
120
118
Longitude West from Washington
47
45
43
41
46
44
42
PACIFIC OCEAN
CALIFORNIA
NEVADA
IDAHO
OREGON
CLATSOP
COLUMBIA
WASHINGTON
TILLAMOOK
YAMHILL
MULTNOMAH
CLACKAMAS
MARION
POLK
BENTON
LINN
LANE
DOUGLAS
COOS
CURRY
JOSEPHINE
JACKSON
KLAMATH
LAKE
CROOK
WASCO
SHERMAN
GILLIAM
MORROW
UMATILLA
UNION
WALLOWA
BAKER
GRANT
HARNEY
MALHEUR
COLUMBIA RIVER
Snake R.
BLUE MTS.
CASCADE MTS.
CALAPOOIA MTS.
THREE SISTERS
Mt. Hood
Portland
Salem
The Dalles
Pendleton
Baker City
Eugene
Roseburg
Jacksonville
Empire City
Astoria
Walla Walla
Yakima
Lewiston


WASHINGTON
SCALE OF MILES
BRITISH COLUMBIA
VANCOUVER ISLAND
IDAHO
OREGON
STRAIT OF GEORGIA
STRAIT OF JUAN DE FUCA
PACIFIC
WHATCOM
SKAGIT
SNOHOMISH
SAN JUAN
ISLAND
CLALLAM
JEFFERSON
KITSAP
MASON
CHEHALIS
KING
PIERCE
THURSTON
PACIFIC
LEWIS
WAHKIAKUM
COWLITZ
CLARKE
SKAMANIA
KLICKITAT
YAKIMA
KITTITAS
OKANOGAN
STEVENS
SPOKANE
LINCOLN
DOUGLAS
ADAMS
FRANKLIN
WHITMAN
GARFIELD
COLUMBIA
WALLA WALLA
ASOTIN
Longitude West from Washington
Longitude West from Greenwich
Lake Chelan
Columbia River
Yakima River
Mt. Baker
Mt. Olympus
Mt. Rainier
Mt. St. Helens
Mt. Adams
Olympia
Seattle
Tacoma
Spokane Falls
Walla Walla
Vancouver
Portland
Victoria
Port Townsend
Ellensburgh
North Yakima
Colfax
Dayton
Pomeroy
Asotin
Waterville
Conconully
Colville
Ritzville
Sprague
Davenport
Goldendale
Kalama
Chehalis
Montesano
Cathlamet
Oysterville
Port Angeles
Shelton
Sedro
Mt. Vernon
Whatcom
Snohomish
The Dalles
Pendleton
Lewiston
Moscow
Astoria
Tillamook
Nez Perces
Umatilla
Morrow
Gilliam
Sherman
Wasco
Multnomah
Clackamas
Washington
Yamhill
Clatsop
Columbia
Tillamook


ARIZONA
Longitude West from Greenwich
Longitude West from Washington
114
112
110
36
34
32
33
UTAH
NEVADA
CALIFORNIA
NEW MEXICO
MEXICO
GULF OF CALIFORNIA
SCALE OF MILES
ARIZONA
MOHAVE
COCONINO
YAVAPAI
APACHE
NAVAJO
MOQUI INDIAN RESERVATION
NAVAJO INDIAN RESERVATION
MARICOPA
GILA
PINAL
GRAHAM
YUMA
PIMA
COCHISE
SAN CARLOS INDIAN RESERVATION
GILA RIVER INDIAN RESERVATION
COLORADO
Phoenix
Prescott
Flagstaff
Kingman
Yuma
Tucson
Tombstone
Florence
Globe
Holbrook
St. Johns
Winslow
Williams
Tempe
Wickenburgh
Casa Grande
Gila Bend
Solomonsville
Clifton
Nogales
Bisbee
Benson
Willcox
Fort Apache
Fort Grant
Fort Bowie
Camp Verde
Lees Ferry
Hardyville
Mohave City
Ehrenberg
Parker
SAN FRANCISCO MTS.
GRAND CANYON
PAINTED DESERT
KAIBAB PLATEAU
SANTA FE
SOUTHERN PACIFIC

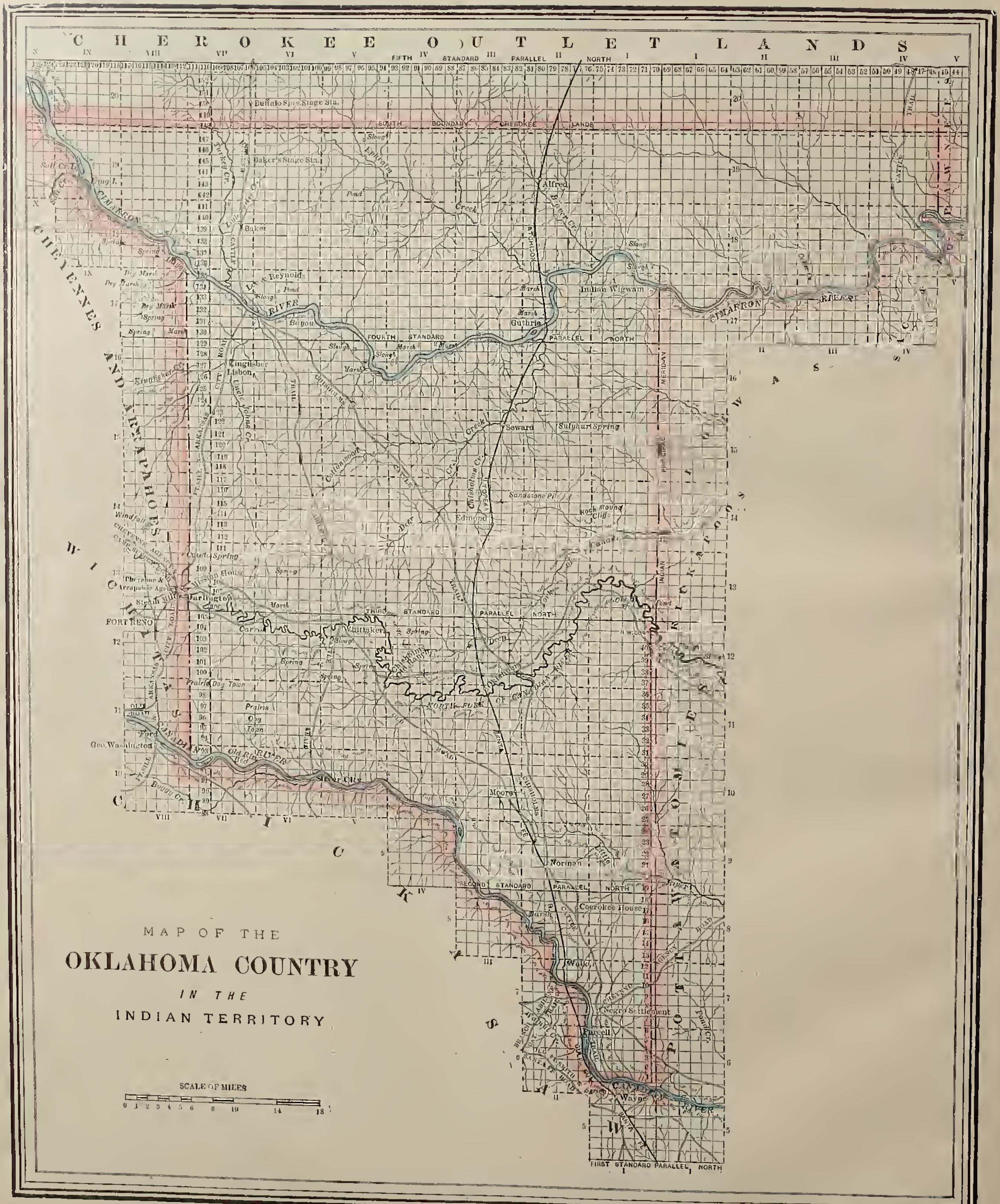


NEW MEXICO
Longitude West from Greenwich
Longitude West from Washington
108
106
104
36
34
32
31
29
27
C O L O R A D O
T E X A S
M E X I C O
N E W M E X I C O
SAN JUAN
RIO ARRIBA
TAOS
COLFAX
MORA
SANTA FE
BERNALILLO
SAN MIGUEL
VALENCIA
GUADALOUPE
LINCOLN
SOCORRO
CHAVES
SIERRA
GRANT
DONA ANA
EDDY
NAVAJO INDIAN RESERVATION
JICARILLA APACHE IND. RES.
ZUNI IND. RESERVE
ZUNI PLATEAU
FT. WINGATE MILITARY RESERVE
FORT UNION MILITARY RESERVE
FT. BUTLER MIL. RES.
FORT SUMNER MILITARY RESERVE
FORT CRAIG MILITARY RESERVE
FORT THORN MILITARY RES.
MILITARY RESERVE
MESCALERO APACHE OR FORT STANTON IND. RESERVE
PACIFIC DIVIDE
ATLANTIC AND
PLAINS OF SAN AUGUSTIN
BARREN PLAIN
OPEN VALLEY
Rolling Prairie
MESA DE LOS LOBOS
MESA
SOLDIER MESA
CARRIZO VALLEY
MESCALERO VALLEY
Rio Mancos
Rio Grande
Rio San Juan
Rio Puerco
Pecos R.
Canadian R.
Cimarron River
Rio Hondo
Rio Felix
Black River
Black Range
Mogollon Range
Datil Range
Sinal Mts.
San Francisco Range
Sacramento Mts.
Guadaloupe Mts.
San Andres Mts.
Organ Mts.
Oscuro Range
Sierra Caballo
Burro Mts.
Florida Mts.
Jemez Mts.
Capitan
Sierra Blanca
Manzano
Sandia Mts.
San Ysidro Mts.
Canon Largo
Sand Hills
Salt Lake
Crater
Trinidad
Conejos
Antonio
Ignacio
Florida
Price
Chama
Tierra Amarilla
Navajo
Farmington
Aztec
Bloomfield
Old Stone Tower
Taos
Elizabethtown
Cimarron
Springer
Raton
Blossburgh
Otero
Clayton
Folsom
Mora
Wagon Mound
Fort Union
Watrous
Las Vegas
Santa Fe
Pecos
Glorieta
Bernalillo
Albuquerque
Los Cerrillos
Golden
San Pedro
Pajarito
Isleta Sta.
Los Lunas
Peralta
Valencia
Tome
Belen
A. & P. Jc.
Wallace
Gallup
Fort Wingate
Manuelito
Defiance
Zuni
Ojo Caliente
Laguna
Acomita
Grant
San Mateo
Puerto de Luna
Santa Rosa
Fort Sumner
Fort Bascom
Liberty
La Cueva
Anton Chico
Socorro
Magdalena
San Antonio
San Marcial
Fort Craig
Engle
Hillsborough
Kingston
Lake Valley
Silver City
Georgetown
Fort Bayard
Pinos Altos
Deming
Lordsburgh
Shakespeare
Hachita
Separ
Nutt
Rincon
Fort Cummings
Las Cruces
Dona Ana
Mesilla
Organ
Anthony
La Mesa
El Paso
Ysleta
San Elizario
Fabens
Lincoln
Fort Stanton
White Oaks
Nogal
Tularosa
La Luz
Roswell
Seven Rivers
Eddy
Pope
Hermosa
Pyote
Lag. de Guzman
Boca Grande
Scale of Miles
0 5 10 20 30 40 50


KANSAS
COLORADO
OKLAHOMA
BEAVER
CHEROKEE OUTLET
OSAGE
KANSAS
PAWNEE
PONCAS
TONKAWA
OTOES AND MISSOURIAS
QUAPAWS
CHEROKEE NATION
TAHLEQUAH
CREEK NATION
SEMINOLE
CHOCTAW NATION
CHICKASAW NATION
KIOWA COMANCHE AND APACHE
GREER
KINGFISHER
CANADIAN
LOGAN
PAYNE
OKLAHOMA
CLEVELAND
POTTAWATOMIE
GUTHRIE
MILITARY RESERVATION
ARKANSAS
TEXAS
Longitude West from Greenwich
SCALE OF MILES

OKLAHOMA AND INDIAN TERS.

ENGRAVED FOR
Standard Atlas of the World

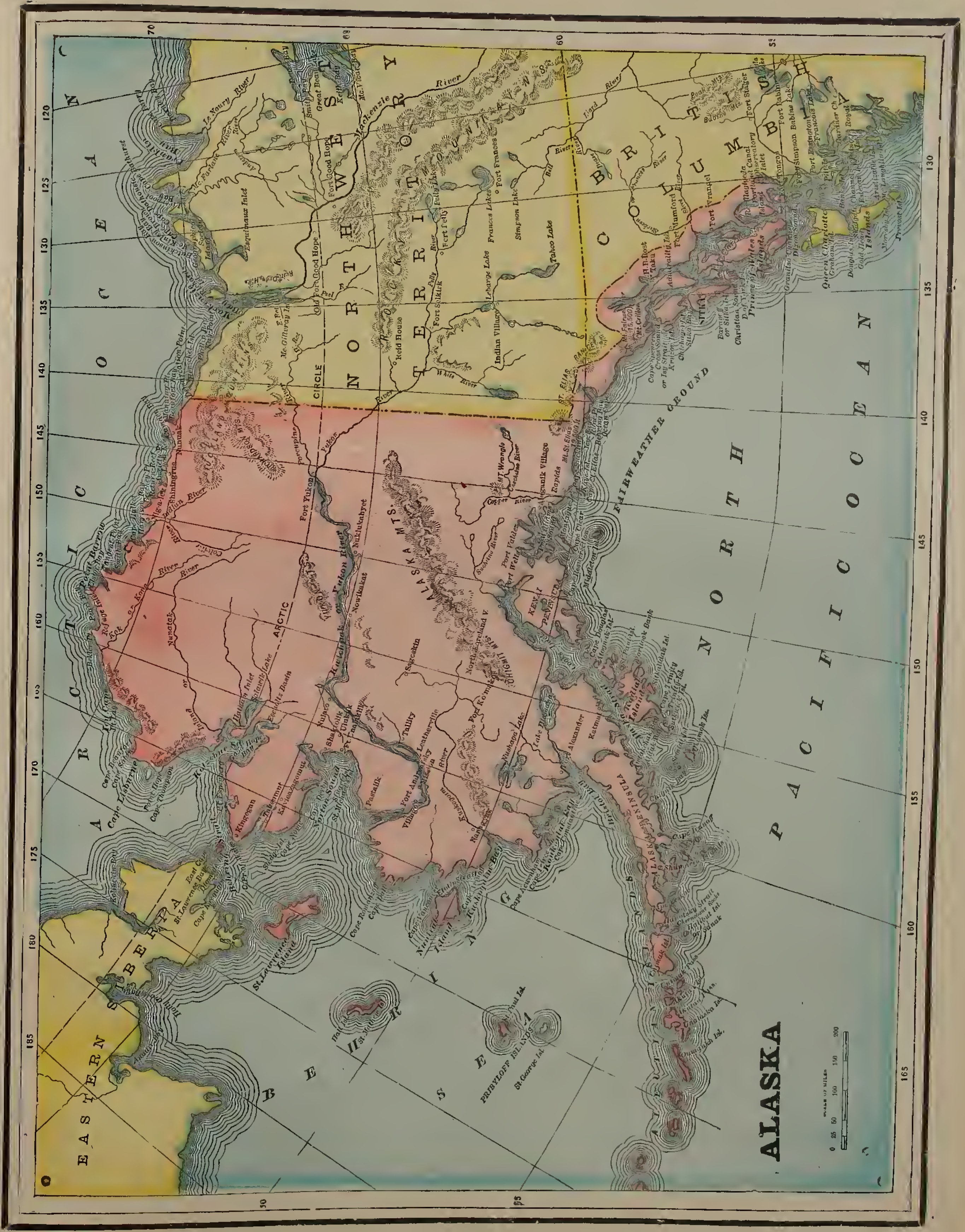

CHEROKEE OUTLET LANDS
FIFTH STANDARD PARALLEL NORTH
SOUTH BOUNDARY CHEROKEE LANDS
Buffalo Spg. Stage Sta.
Baker's Stage Sta.
Baker
Alfred
Ephraim
Lee & Reynolds
Indian Wigwam
CIMARRON RIVER
Guthrie
FOURTH STANDARD PARALLEL NORTH
Kingfisher
Lisbon
Kingfisher Cr.
Seward
Sulphur Spring
Cottonwood
Chisholm Cr.
Sandstone Pile
Rock Mound Cliff
Edmond
CHEYENNES AND ARAPAHOES
Windfall
Caddo Spring
Mission House
Cheyenne & Arrapahoe Agency
Darlington
FORT RENO
THIRD STANDARD PARALLEL NORTH
Whittaker
Deep
Oklahoma
NORTH FORK OF CANADIAN RIVER
Prairie Dog Town
Geo. Washington
Ford
CANADIAN
Silver City
Moore
Norman
SECOND STANDARD PARALLEL NORTH
Cherokee House
Walla
Negro Settlement
Purcell
Wayne
CANADIAN RIVER
FIRST STANDARD PARALLEL NORTH
PRINCIPAL MERIDIAN
INDIAN MERIDIAN
SACS
POTTAWATOMIES
KICKAPOOS
CHICKASAWS
WICHITAS
SANTA FE
SCALE OF MILES
0 1 2 3 4 5 6 8 10 14 18

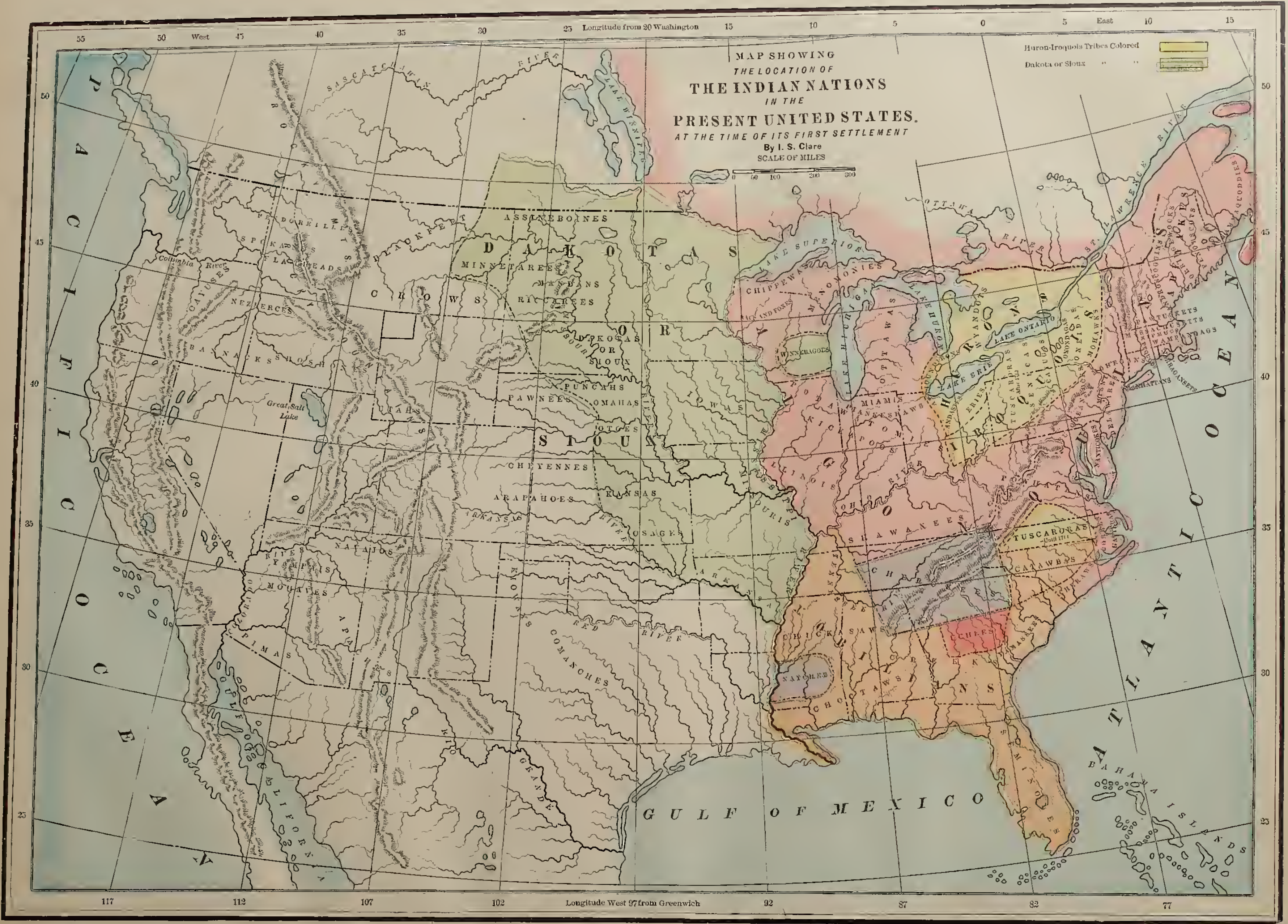
MAP OF THE

OKLAHOMA COUNTRY

IN THE

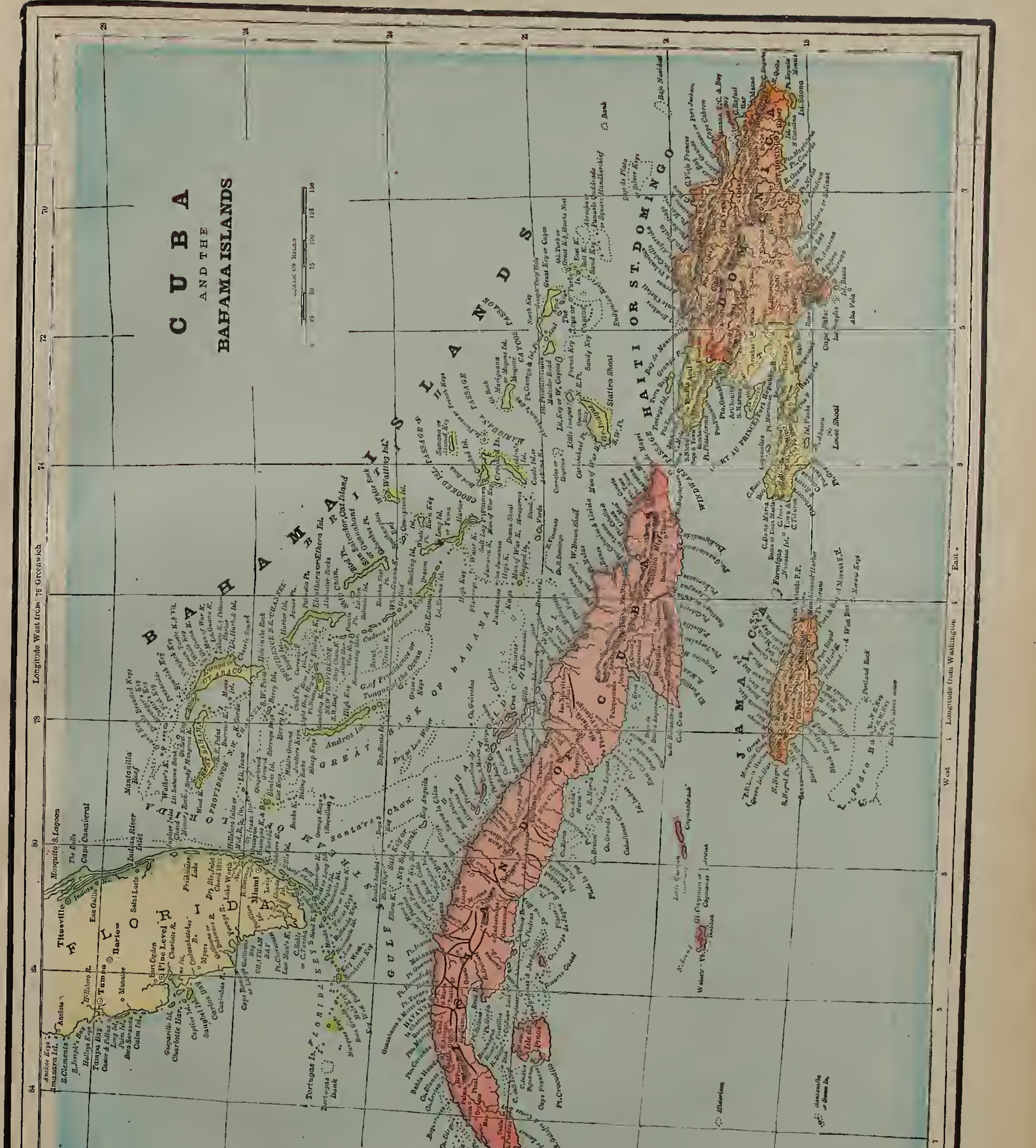
INDIAN TERRITORY


ALASKA
ARCTIC OCEAN
NORTH PACIFIC OCEAN
BERING SEA
EASTERN SIBERIA
NORTH WEST TERRITORY
BRITISH COLUMBIA
ROCKY MOUNTAINS
ALASKA MTS.
ARCTIC CIRCLE
FAIRWEATHER GROUND
ALASKA PENINSULA
KENAI PENINSULA
ALEUTIAN ISLANDS
PRIBYLOFF ISLANDS
St. Paul Isl.
St. George Isl.
St. Lawrence Island
St. Matthew I.
Yukon River
Mackenzie River
Porcupine
Fort Yukon
Point Barrow
Cape Lisburne
Mt. St. Elias
Mt. Wrangle
Sitka
Kodiak Isl.
Nunivak Island
Queen Charlotte Islands
Prince of Wales Island
Fort Simpson
Fort Wrangel
Copper River
Nushagak
Unalaska Isl.
Unimak Isl.
Scale of Miles
0 25 50 100 150 200
70
65
60
55
120
125
130
135
140
145
150
155
160
165
170
175
180
185



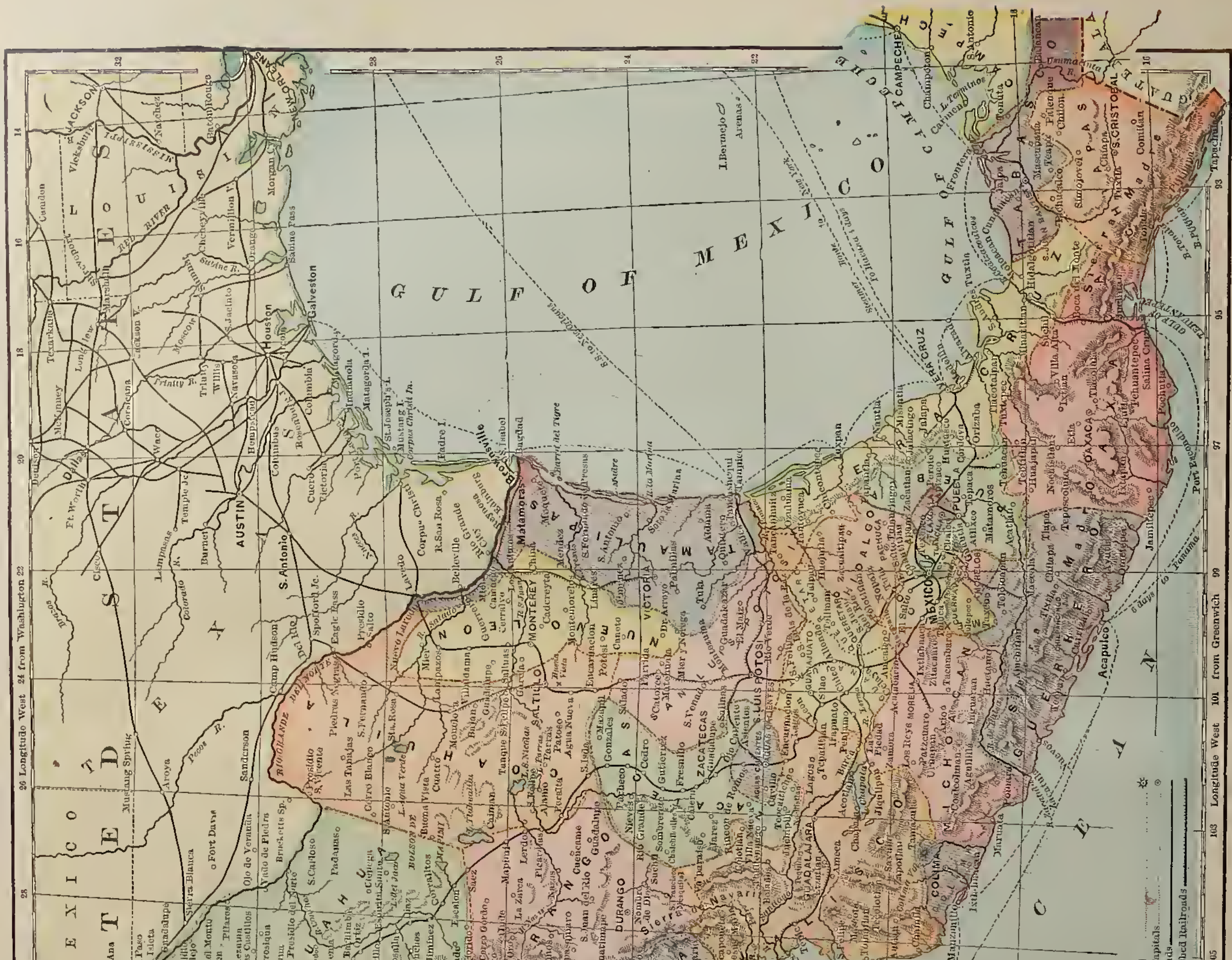
MAP SHOWING
THE LOCATION OF
THE INDIAN NATIONS
IN THE
PRESENT UNITED STATES.
AT THE TIME OF ITS FIRST SETTLEMENT
By I. S. Clare

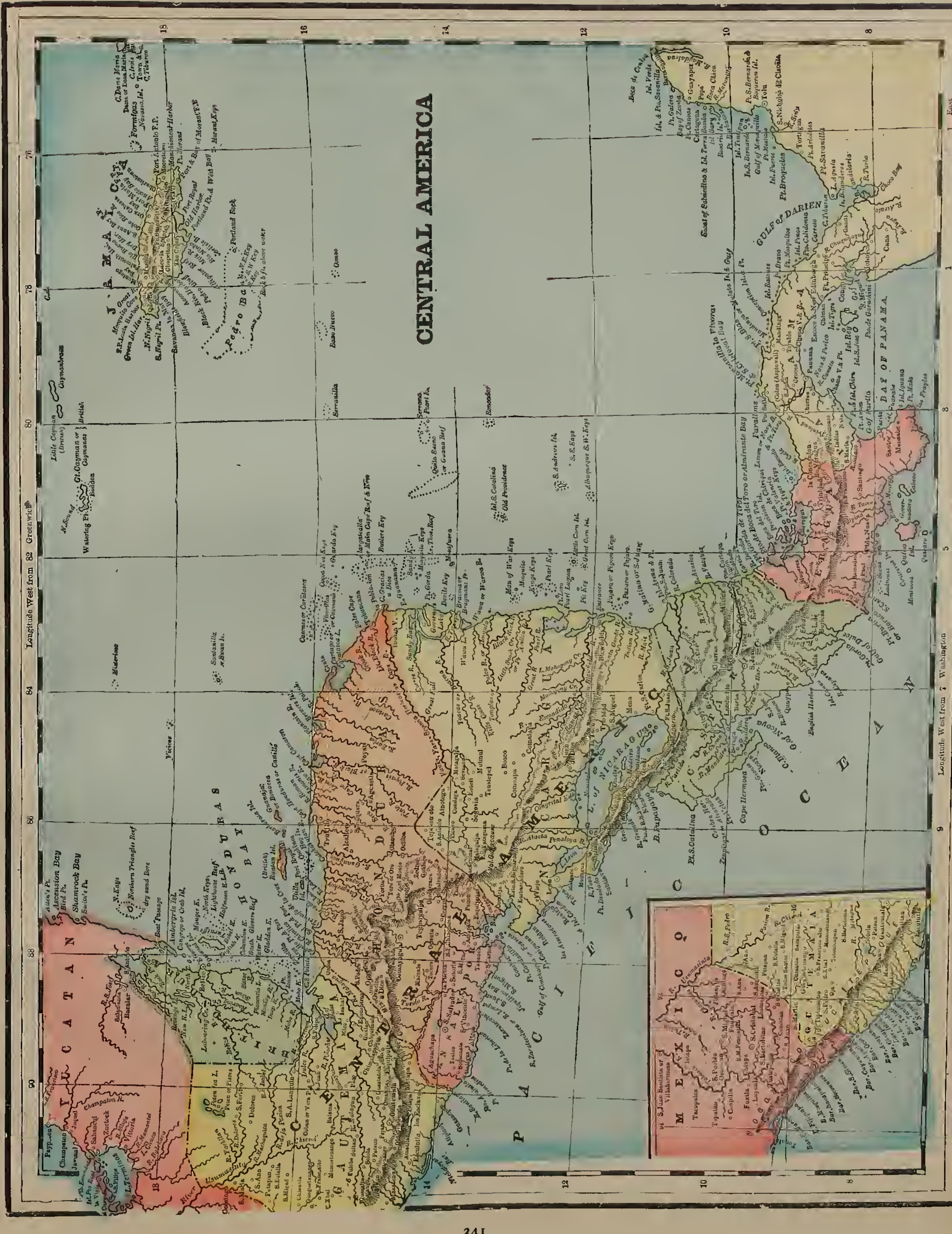
SCALE OF MILES
0 50 100 200 300
Huron-Iroquois Tribes Colored
Dakota or Sioux
Longitude from 20 Washington
West
East
Longitude West 97 from Greenwich
PACIFIC OCEAN
ATLANTIC OCEAN
GULF OF MEXICO
GULF OF CALIFORNIA
BAHAMA ISLANDS
SASKATCHEWAN RIVER
LAKE WINNIPEG
ST. LAWRENCE RIVER
OTTAWA RIVER
LAKE SUPERIOR
LAKE MICHIGAN
LAKE HURON
LAKE ERIE
LAKE ONTARIO
Columbia River
Great Salt Lake
MISSISSIPPI RIVER
MISSOURI
OHIO RIVER
ARKANSAS
RED RIVER
RIO GRANDE
ROCKY MTS.
DAKOTAS
SIOUX
ALGONQUINS
HURON-IROQUOIS
MOBILIANS
ASSINIBOINES
BLACKFEET
MINNETAREES
MANDANS
RICAREES
CROWS
DAKOTAS OR SIOUX
PUNCAHS
PAWNEES
OMAHAS
OTOES
IOWAS
CHEYENNES
ARAPAHOES
KANSAS
OSAGES
KIOWAS
COMANCHES
PEND D'OREILLES
SPOKANES
FLATHEADS
CAYUSES
NEZ PERCES
BANNACKS
SHOSHONES
UTAHS
NAVAJOS
APACHES
MOHAVES
PIMAS
YUMAS
CHIPPEWAS
MENOMONIES
SACS AND FOXES
WINNEBAGOES
OTTAWAS
POTAWATOMIES
KICKAPOOS
MIAMIS
PIANKESHAWS
ILLINOIS
SHAWANEES
WYANDOTS
ERIES
ANDASTES
TUSCARORAS
SENECAS
CAYUGAS
ONONDAGAS
ONEIDAS
MOHAWKS
POWHATANS
NANTICOKES
DELAWARES
MANHATTANS
NARRAGANSETS
WAMPANOAGS
MASSACHUSETTS
NIPMUCKS
PAWTUCKETS
PENOBSCOTS
ABENAKIS
PASSAMAQUODDIES
TUSCARORAS Until 1711
CATAWBAS
CHERAWS
CHEROKEES
YAMASSEES
UCHEES
CREEKS
CHICKASAWS
CHOCTAWS
NATCHEZ
SEMINOLES



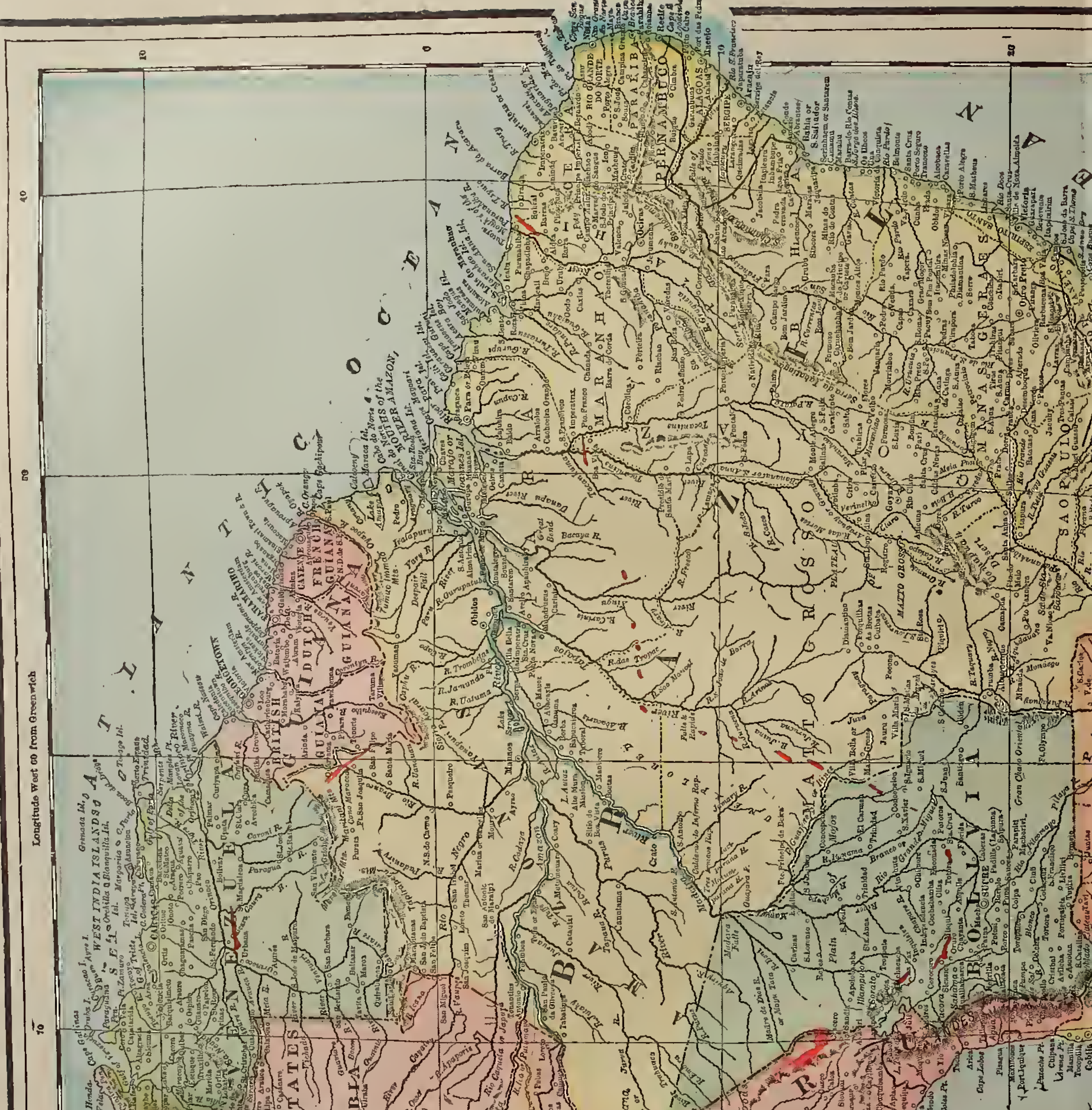
CUBA AND THE BAHAMA ISLANDS

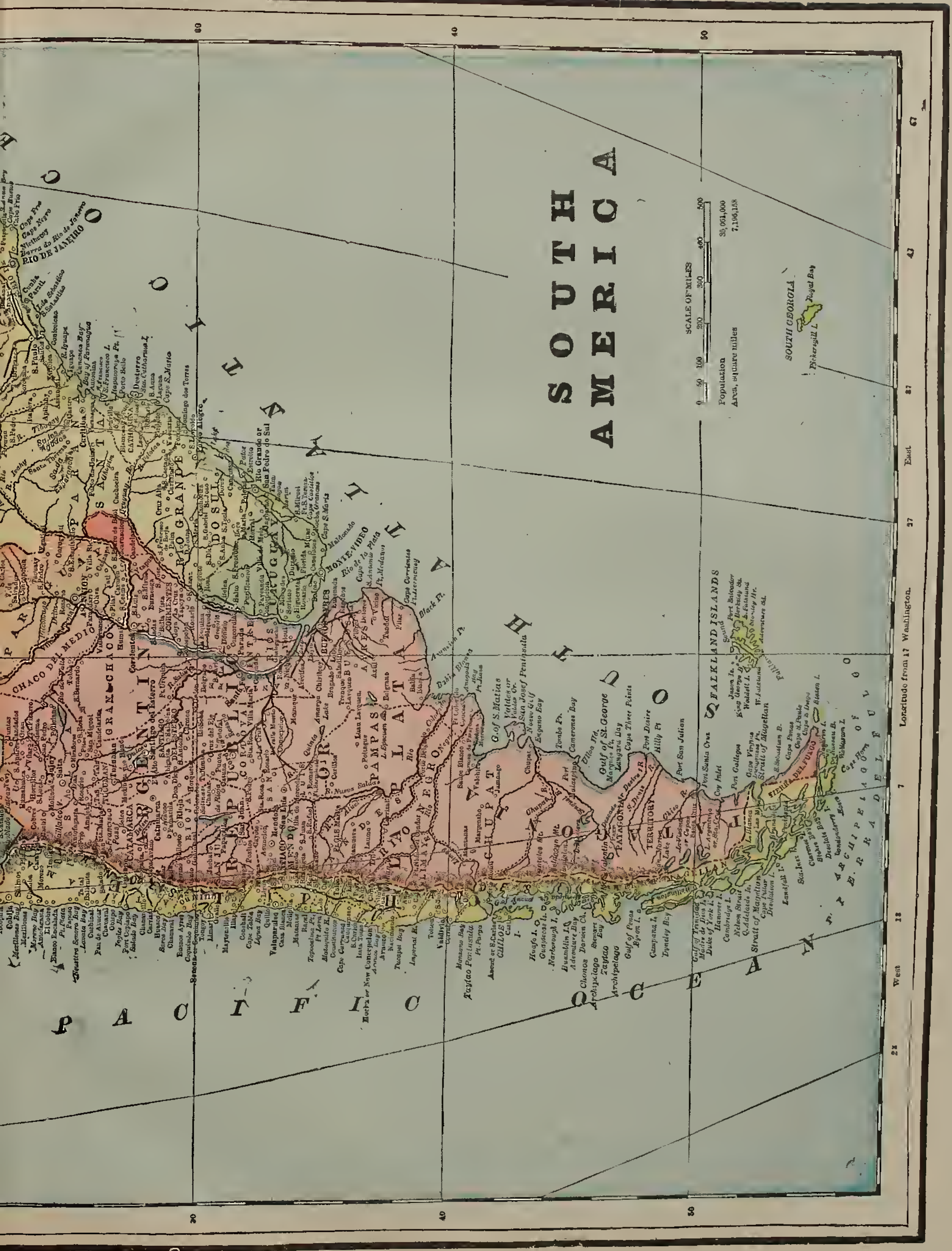
Scale of Miles
0 25 50 75 100 125 150
Longitude West from 76 Greenwich
West 1 Longitude from Washington 1 East
FLORIDA
BAHAMA ISLANDS
GREAT BANK OF BAHAMA
CUBA
JAMAICA
HAITI OR ST. DOMINGO
WINDWARD PASSAGE
Gulf of Florida
Florida Keys
Santaren Chan.
N.W. Providence Chan.
N.E. Providence Chan.
Gt. Abaco
Andros Isl.
New Providence
Eleuthera or Elhera Isl.
Watling Isl.
Crooked Isl. Passage
Caycos Passage
Mariguana Passage
Great Inagua
Isle of Pines
Grand Cayman
Little Cayman
Cayman Brac
Tampa
Tampa Bay
Titusville
Cape Canaveral
Miami
Key West
Havana
Cape S. Antonio
Port au Prince
Santo Domingo
Pedro Bank
Morant Keys

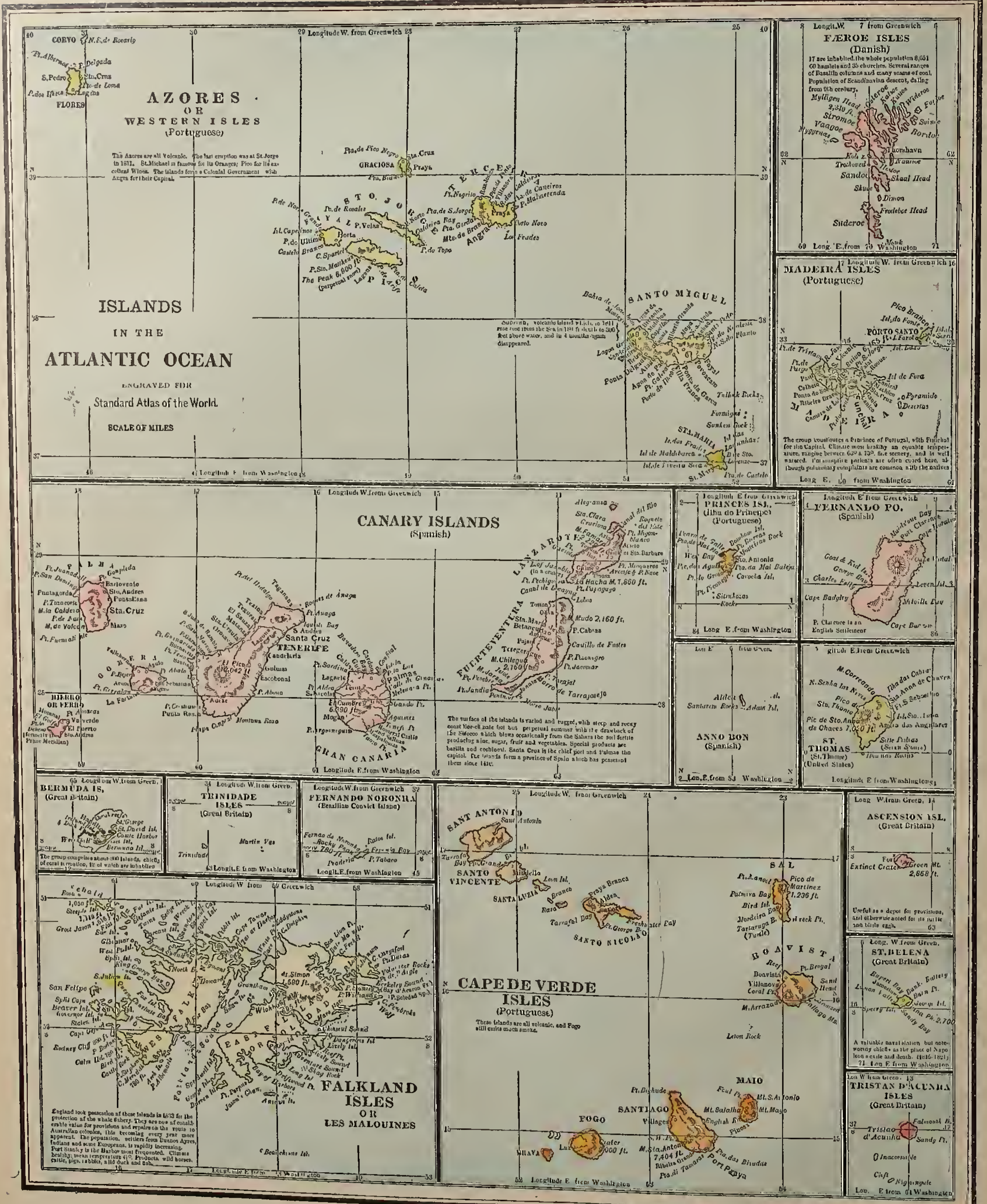

MEXICO
Scale of Miles
0 50 100 150 200
Capital
State Capitals
Railroads
Unfinished Railroads
Longitude West from Greenwich
Longitude West from Washington
GULF OF MEXICO
GULF OF CAMPECHE
GULF OF CALIFORNIA
PACIFIC OCEAN
UNITED STATES
TEXAS
LOUISIANA
NEW MEXICO
ARIZONA
CALIFORNIA
LOWER CALIFORNIA
SONORA
CHIHUAHUA
COAHUILA
NUEVO LEON
TAMAULIPAS
DURANGO
SINALOA
ZACATECAS
SAN LUIS POTOSI
JALISCO
MICHOACAN
GUERRERO
OAXACA
VERA CRUZ
PUEBLA
CHIAPAS
TABASCO
CAMPECHE
YUCATAN
HONDURAS
GUATEMALA
BELIZE
MEXICO
AUSTIN
S. Antonio
Houston
Galveston
N. ORLEANS
Tucson
El Paso
MONTEREY
SALTILLO
GUADALAJARA
Acapulco
Mazatlan
MERIDA


CENTRAL AMERICA
Longitude West from 82 Greenwich
Longitude West from 7 Washington
YUCATAN
HONDURAS
HONDURAS BAY
GUATEMALA
SALVADOR
NICARAGUA
COSTA RICA
PANAMA
GULF of DARIEN
BAY OF PANAMA
JAMAICA
MEXICO
PACIFIC OCEAN
L. of NICARAGUA
Mosquito Coast
Gulf of Fonseca
Pedro Bank
Gt. Cayman or Caymanas
Little Cayman
Caymanbrac
Swan Is.
Old Providence
Kingston
Spanish Town
Belize
Comayagua
Tegucigalpa
Managua
Leon
Granada
S. Jose
Colon (Aspinwall)
Panama
Cartagena

Amazon Forest (a R Wallace) in red ink


Longitude West 60 from Greenwich
ATLANTIC OCEAN
CARIBBEAN SEA
WEST INDIA ISLANDS
UNITED STATES OF COLOMBIA
VENEZUELA
BRITISH GUIANA
DUTCH GUIANA
FRENCH GUIANA
ECUADOR
PERU
BOLIVIA
BRAZIL
AMAZONAS
MATTO GROSSO
PARA
MARANHAO
PIAUHY
CEARA
PERNAMBUCO
BAHIA
GOYAZ
MINAS GERAES
SAO PAULO
MOUTHS OF THE AMAZON
SOUTH PACIFIC
GALAPAGOS ISLANDS


SOUTH AMERICA
SCALE OF MILES
0 50 100 200 300 400 500
Population 35,061,000
Area, square miles 7,196,158
SOUTH GEORGIA
Royal Bay
Pickersgill I.
FALKLAND ISLANDS
ATLANTIC OCEAN
PACIFIC OCEAN
ARGENTINE REPUBLIC
URUGUAY
RIO GRANDE DO SUL
PATAGONIA
TIERRA DEL FUEGO
CHILOE
MONTEVIDEO
BUENOS AYRES
RIO DE JANEIRO
Longitude from 17 Washington.
West
East


ISLANDS IN THE ATLANTIC OCEAN
ENGRAVED FOR Standard Atlas of the World.
SCALE OF MILES
AZORES OR WESTERN ISLES (Portuguese)
CORVO
FLORES
GRACIOSA
TERCEIRA
Angra
STO. JORGE
FAYAL
PICO
The Peak 6,600 ft.
SANTO MIGUEL
Ponta Delgada
STA. MARIA
FÆROE ISLES (Danish)
Thorshavn
MADEIRA ISLES (Portuguese)
PORTO SANTO
Funchal
CANARY ISLANDS (Spanish)
PALMA
TENERIFE
Santa Cruz
El Pico 12,042 ft.
GOMERA
HIERRO OR FERRO
GRAN CANARIA
Palmas
FUERTEVENTURA
LANZAROTE
PRINCES ISL. (Ilha do Principe) (Portuguese)
FERNANDO PO. (Spanish)
ANNO BON (Spanish)
ST. THOMAS (St. Thomé) (United States)
BERMUDA IS. (Great Britain)
TRINIDADE ISLES (Great Britain)
FERNANDO NORONHA (Brazilian Convict Island)
FALKLAND ISLES OR LES MALOUINES
WEST FALKLAND
EAST FALKLAND
CAPE DE VERDE ISLES (Portuguese)
SANT ANTONIO
SANTO VINCENTE
SANTA LUZIA
SANTO NICOLAO
SAL
BOAVISTA
MAIO
SANTIAGO
FOGO
BRAVA
Port Praya
ASCENSION ISL. (Great Britain)
Green Mt. 2,868 ft.
ST. HELENA (Great Britain)
Jamestown
TRISTAN D'ACUNHA ISLES (Great Britain)
Inaccessible
Nightingale
Longitude W. from Greenwich
Longitude E. from Washington

The Azores are all Volcanic. The last eruption was at St.Jorge in 1811. St.Michael is famous for its Oranges; Pico for its excellent Wines. The islands form a Colonial Government with Angra for their Capital.

Sabrina, volcanic island which in 1811 rose from the Sea in 150 ft. depth to 300 feet above water, and in 4 months again disappeared.

17 are inhabited, the whole population 8,651 60 hamlets and 35 churches. Several ranges of Basaltic columns and many seams of coal. Population of Scandinavian descent, dating from 9th century.

The group constitutes a Province of Portugal, with Funchal for the Capital. Climate most healthy an equable temperature, ranging between 65° & 75°, fine scenery, and is well watered. Consumptive patients are often cured here, although pulmonary complaints are common with the natives

The surface of the islands is varied and rugged, with steep and rocky coast line—climate hot but perpetual summer with the drawback of the Sirocco which blows occasionally from the Sahara the soil fertile producing wine, sugar, fruit and vegetables. Special products are barilla and cochineal. Santa Cruz is the chief port and Palmas the capitol. The islands form a province of Spain which has possessed them since 1496.

P. Clarence is an English Settlement

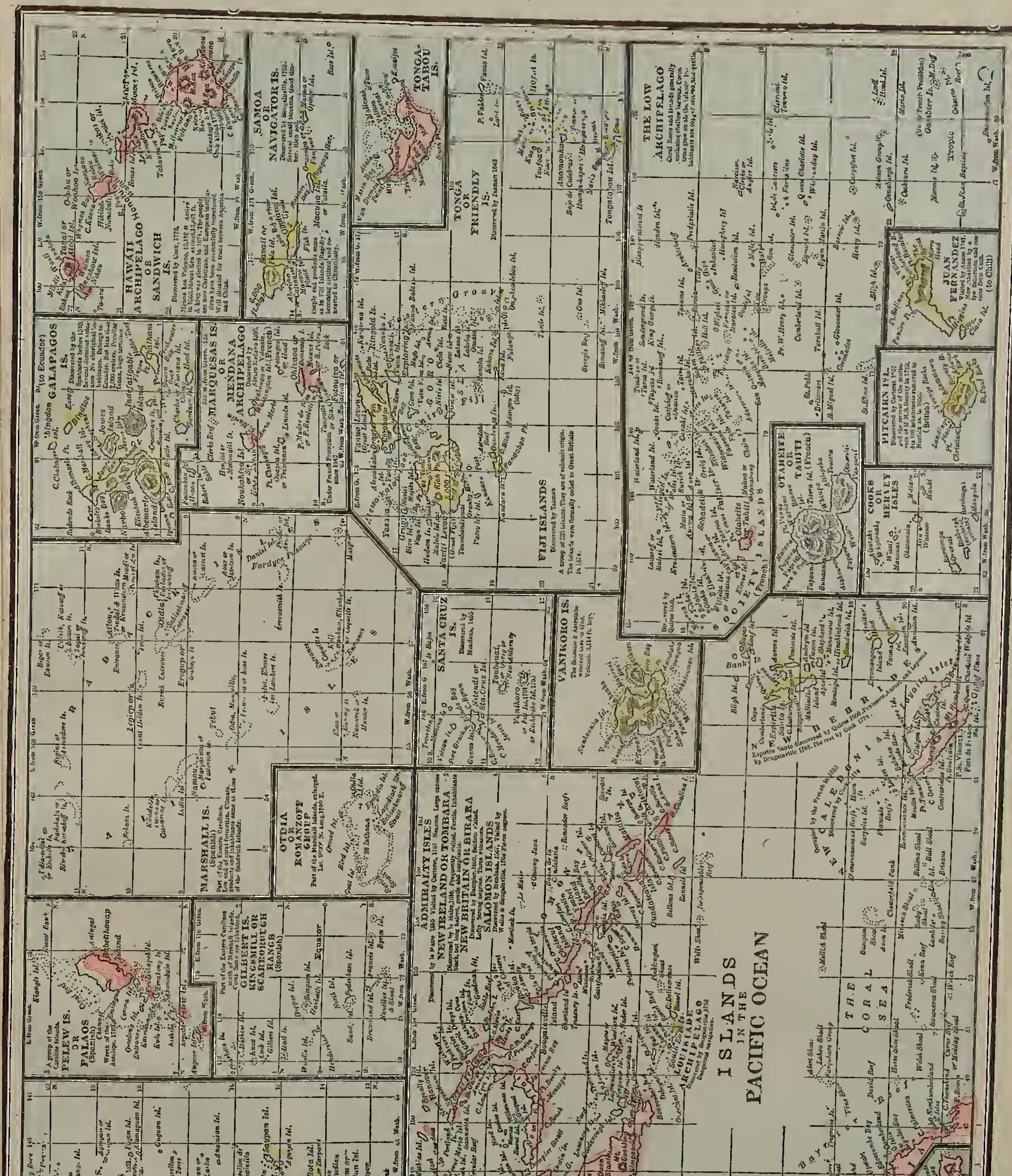
The group comprises about 300 islands, chiefly of coral formation, 12 of which are inhabited

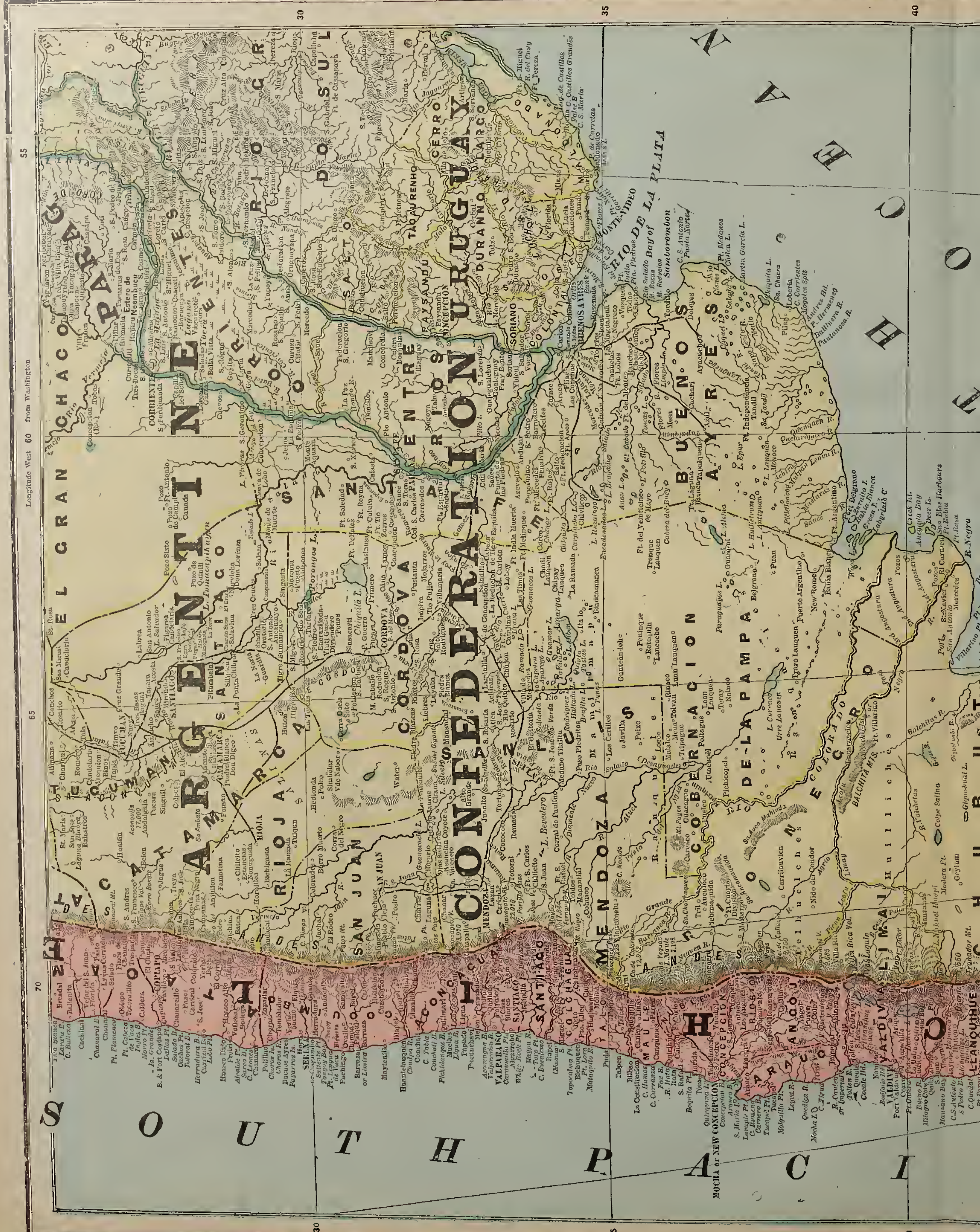
England took possession of these islands in 1833 for the protection of the whale fishery. They are now of considerable value for provisions and repairs on the route to Australian colonies, this becoming every year more apparent. The population, settlers from Buenos Ayres, Indians and some Europeans, is rapidly increasing. Port Stanley is the Harbor most frequented. Climate healthy; mean temperature 41°. Products, wild horses, cattle, pigs, rabbits, wild duck and fish.

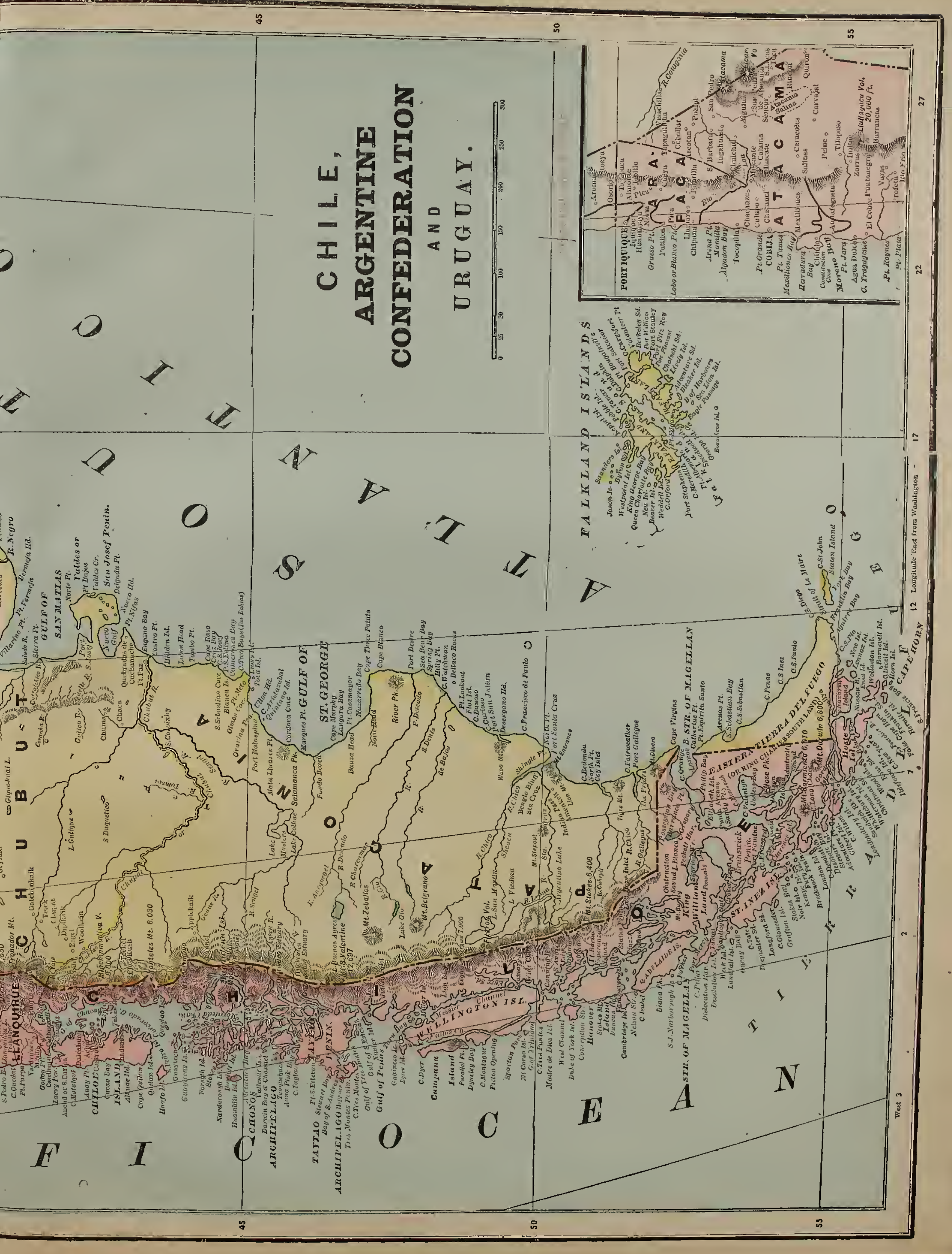
These islands are all volcanic, and Fogo still emits much smoke.

Useful as a depot for provisions, and otherwise noted for its turtle and turtle eggs.

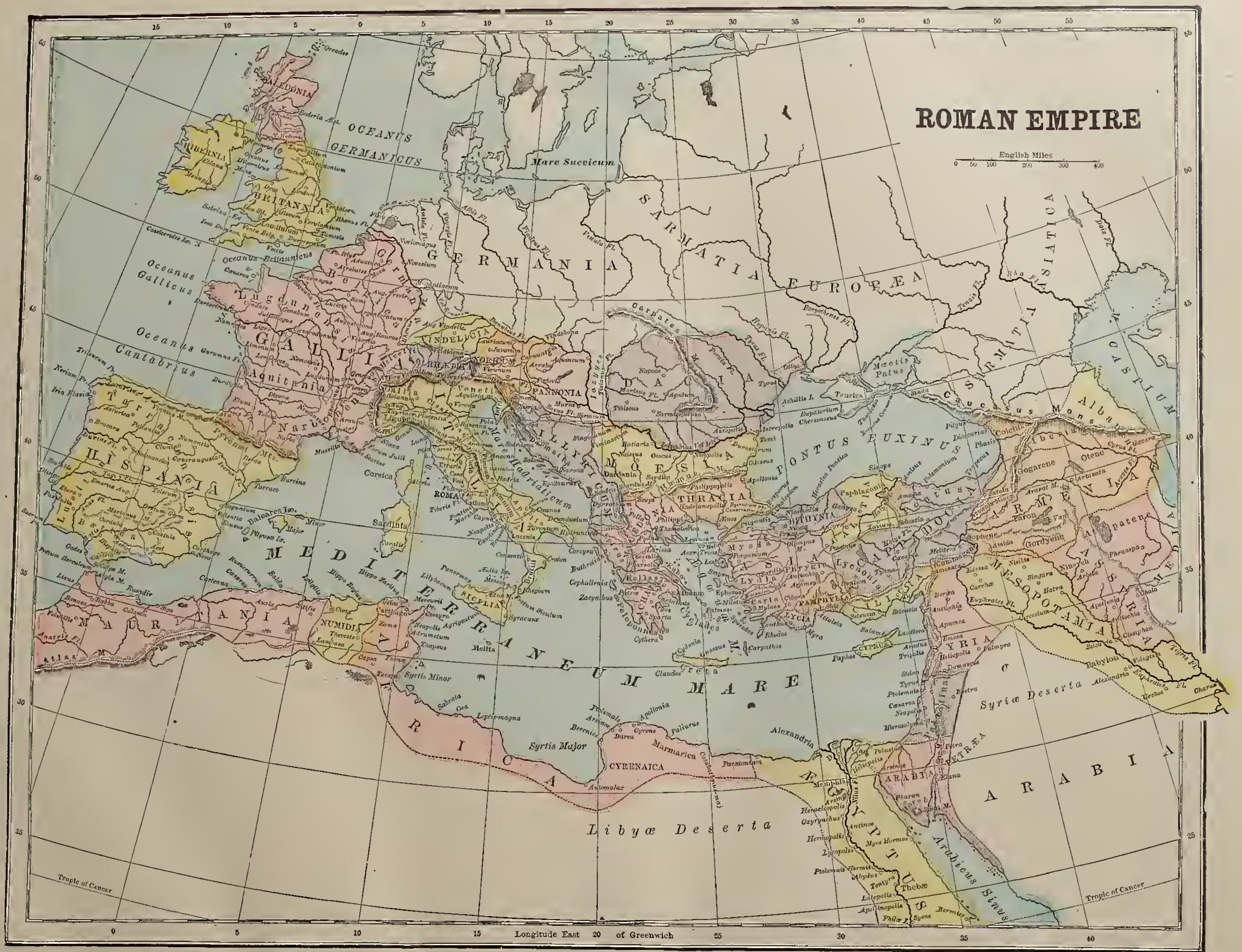
A valuable naval station but noteworthy chiefly as the place of Napoleon's exile and death. (1815-1821)

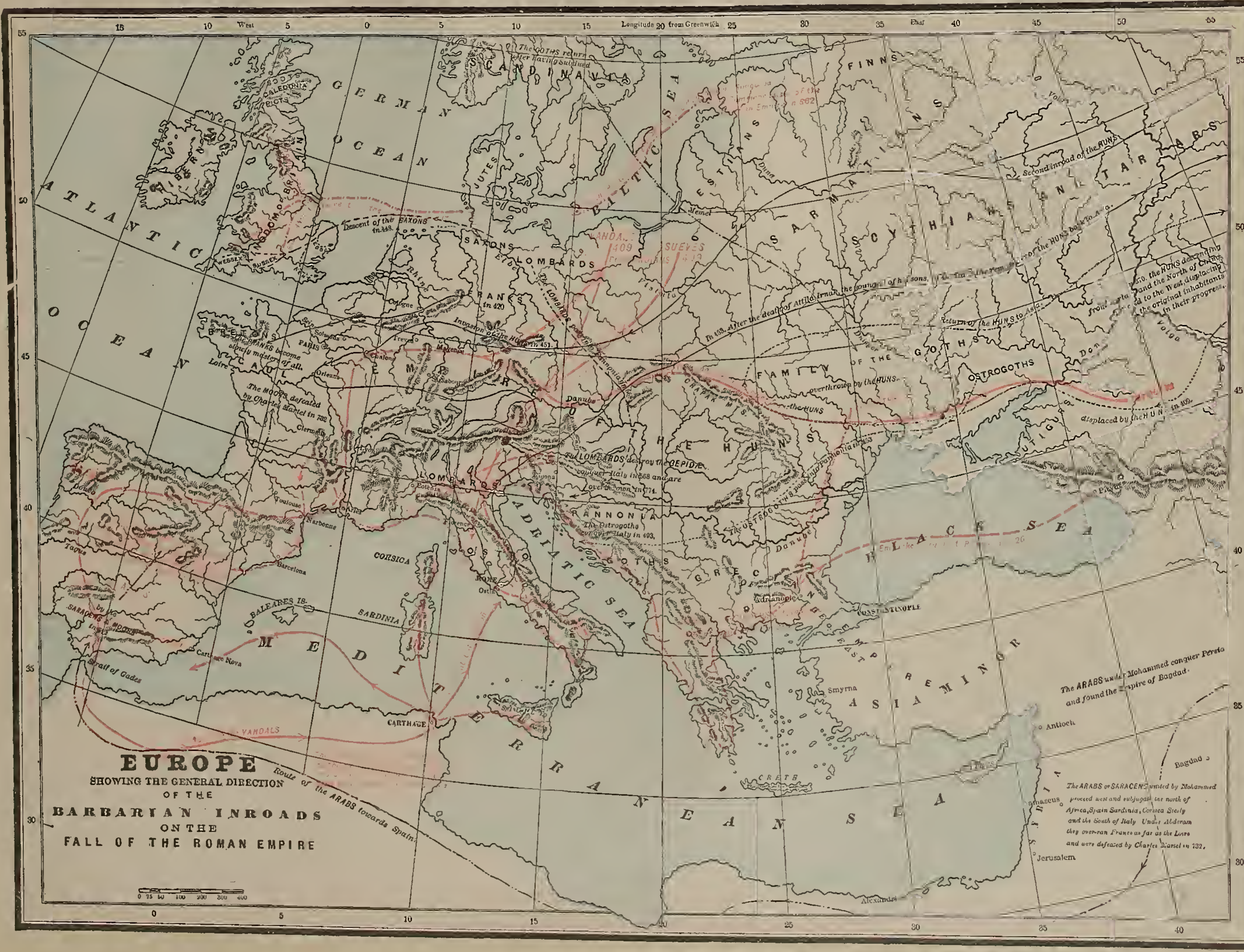

ISLANDS IN THE PACIFIC OCEAN
MARIANA IS. OR LADRONES (Spanish)
PELEW IS. OR PALAOS (Spanish)
MARSHALL IS. (Spanish)
GILBERT IS. KINGSMILL OR SCARBOROUGH RANGE (Spanish)
OTDIA OR ROMANZOFF GROUP
GALAPAGOS IS. (to Ecuador)
MARQUESAS IS. OR MENDANA ARCHIPELAGO
HAWAII ARCHIPELAGO OR SANDWICH IS.
SAMOA OR NAVIGATOR IS.
TONGA-TABOU IS.
TONGA OR FRIENDLY IS.
FIJI ISLANDS
SANTA CRUZ IS.
VANIKORO IS.
THE LOW ARCHIPELAGO
OTAHEITE OR TAHITI (French)
SOCIETY ISLANDS (French)
COOKS OR HERVEY ISLES (British)
PITCAIRN ISL.
JUAN FERNANDEZ (to Chili)
NORFOLK ISL. (British)
NEW GUINEA
ADMIRALTY ISLES
NEW IRELAND OR TOMBARA
NEW BRITAIN OR BIRARA
SOLOMON ISLANDS
LOUISIADE ARCHIPELAGO
THE CORAL SEA
NEW CALEDONIA
NEW HEBRIDES
LOYALTY ISLES


Longitude West 60 from Washington
ARGENTINE CONFEDERATION
EL GRAN CHACO
PARAG
RIO GRANDE DO SUL
URUGUAY
CORRIENTES
ENTRE RIOS
SANTA FE
SANTIAGO
CATAMARCA
TUCUMAN
RIOJA
SAN JUAN
SAN LUIS
CORDOVA
MENDOZA
BUENOS AYRES
GOBERNACION DE LA PAMPA
RIO DE LA PLATA
CHILE
SOUTH PACIFIC
OCEAN
30
35
40
55
60
65
70


CHILE, ARGENTINE CONFEDERATION AND URUGUAY.

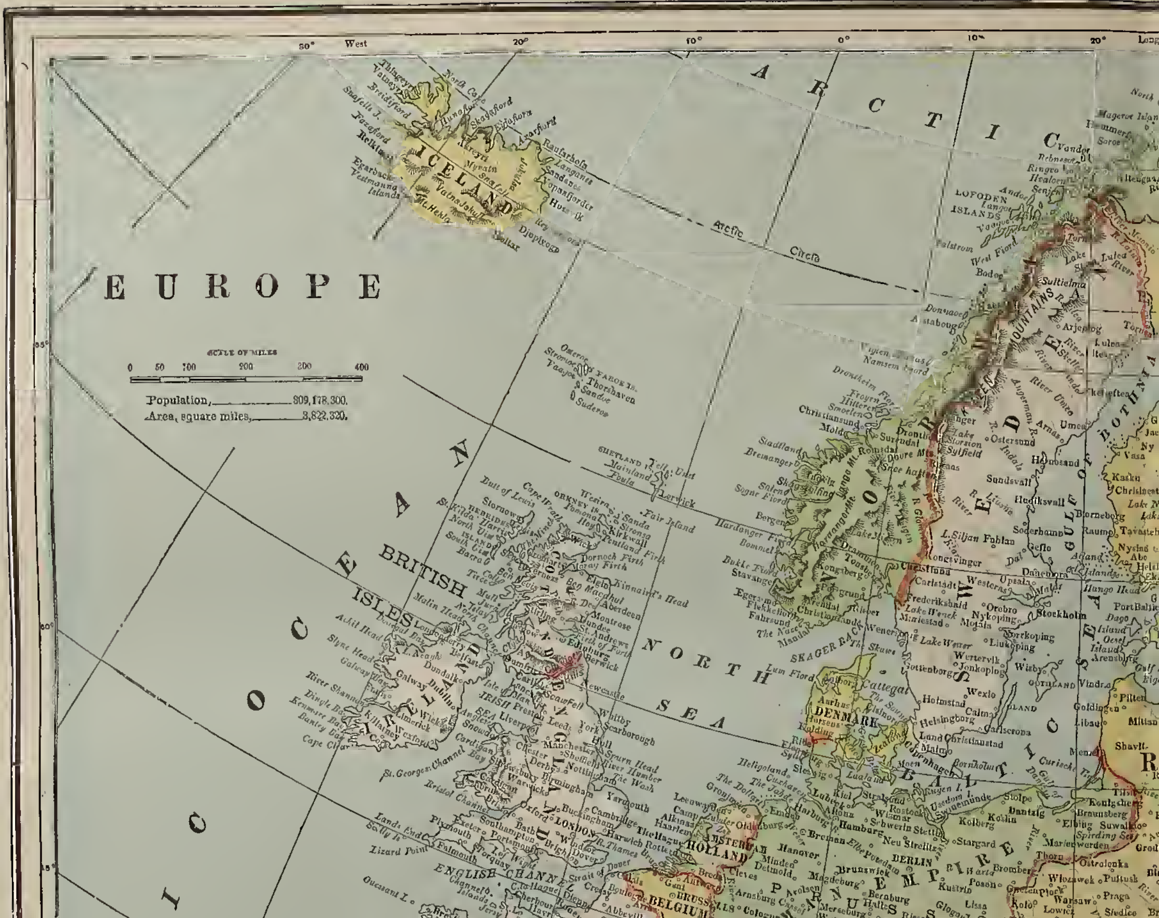
PACIFIC OCEAN
ATLANTIC OCEAN
CHUBUT
PATAGONIA
CHILOE ISLAND
CHONOS ARCHIPELAGO
TAYTAO ARCHIPELAGO
WELLINGTON ISL.
ST. INEZ ISL.
KING WILLIAM LAND
TIERRA DEL FUEGO
EASTERN TIERRA DEL FUEGO (OR KING CHARLES SOUTHLAND)
STR. OF MAGELLAN
FALKLAND ISLANDS
GULF OF SAN MATIAS
GULF OF ST. GEORGE
San Josef Penin.
Staten Island
CAPE HORN
R. Negro
Chubut R.
Mt. Stokes 6,400
Mt. Sarmiento 6,910
Mt. Darwin 6,800
Port Stanley
Port Desire
Port Gallegos
Cape Virgins
Gulf of Penas
Hanover
Hoste Isl.
TARAPACA
ATACAMA
PORTIQUIQUE
COBIJA
Llullayacu Vol. 20,000 ft.
Longitude East from Washington
West 3
2
12
17
22
27
45
50
53
55


ROMAN EMPIRE
English Miles
0 50 100 200 300 400
OCEANUS GERMANICUS
Mare Suevicum
GERMANIA
SARMATIA EUROPÆA
SARMATIA ASIATICA
M. CASPIUM
CALEDONIA
BRITANNIA
HIBERNIA
Oceanus Britannicus
Oceanus Gallicus
Oceanus Cantabrius
GALLIA
Lugdunensis
Aquitania
Narbo
HISPANIA
VINDELICIA
NORICUM
RHÆTIA
PANNONIA
ITALIA
ROMA
Corsica
Sardinia
SICILIA
Mare Hadriaticum
ILLYRICUM
DACIA
Carpates
MOESIA
THRACIA
MACEDONIA
PONTUS EUXINUS
Mæotis Palus
Caucasus Mons
Albania
Iberia
ARMENIA
Atropatene
MESOPOTAMIA
ASSYRIA
SYRIA
CYPRUS
Creta
Syriæ Deserta
ARABIA
ARABIA PETRÆA
Arabicus Sinus
ÆGYPTUS
Alexandria
Thebæ
MEDITERRANEUM MARE
Syrtis Major
Syrtis Minor
CYRENAICA
Marmarica
Libyæ Deserta
AFRICA
NUMIDIA
MAURITANIA
Atlas M.
Tropic of Cancer
Longitude East of Greenwich

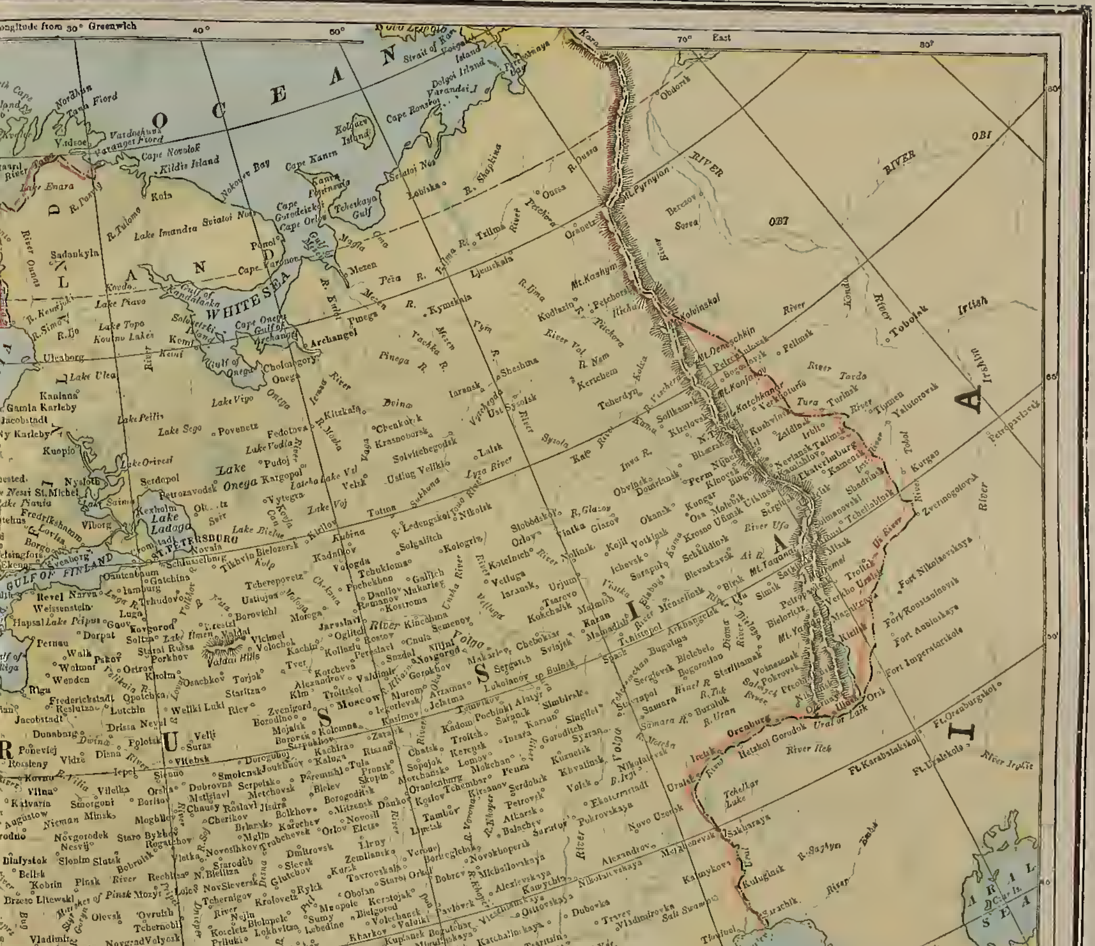


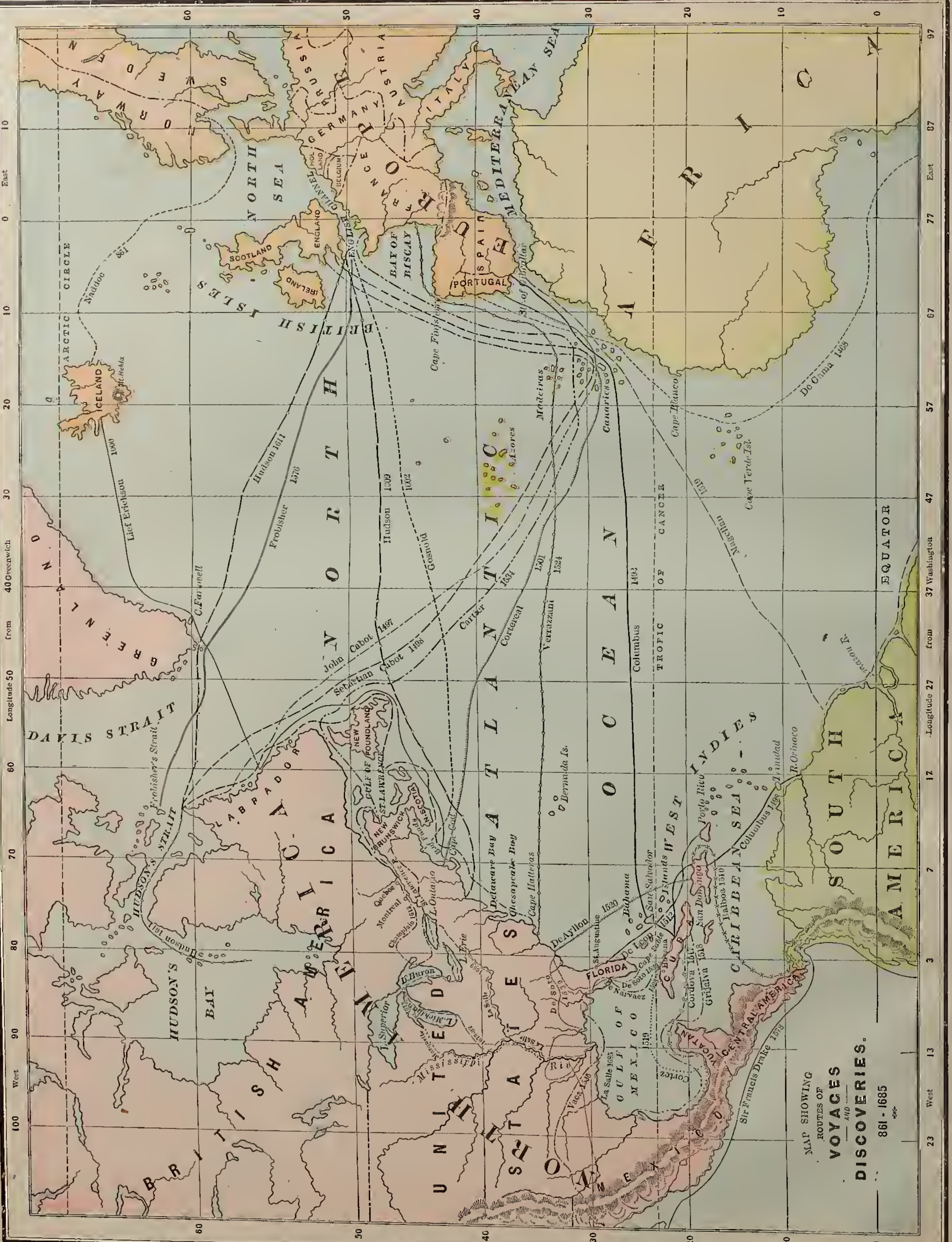
EUROPE
SHOWING THE GENERAL DIRECTION
OF THE
BARBARIAN INROADS
ON THE
FALL OF THE ROMAN EMPIRE

Longitude 20 from Greenwich
West
East
ATLANTIC OCEAN
GERMAN OCEAN
BALTIC SEA
ADRIATIC SEA
MEDITERRANEAN SEA
BLACK SEA
SCANDINAVIA
The GOTHS return after having subdued
FINNS
ESTHIANS
SARMATIANS
SCYTHIANS
TARTARS
CALEDONIA
SCOTS
PICTS
HIBERNIA
BRITANNIA
WESSEX
SUSSEX
Descent of the SAXONS in 449.
JUTES
SAXONS
LOMBARDS
VANDALS 409
SUEVES
FRANKS in 420
Invasion of the HUNS in 451.
BRETONS
GAUL
The FRANKS become absolute masters of all.
The MOORS defeated by Charles Martel in 732
EMPIRE
OF THE HUNS
The LOMBARDS destroy the GEPIDÆ conquer Italy in 568 and are overthrown in 774.
PANNONIA
The Ostrogoths conquer Italy in 493.
GOTHS
The OSTROGOTHS pass into Pannonia in 453
In 453, After the death of Attila, Irnak, the youngest of his sons, with the remnant of the HUNS back to Asia.
Second inroad of the HUNS
Return of the HUNS to Asia.
In 350, the HUNS descending from Tartary and the North of China, advanced to the West, displacing the original inhabitants in their progress.
FAMILY OF THE GOTHS
OSTROGOTHS
overthrown by the HUNS
VISIGOTHS
displaced by the HUNS in 409.
GRECIAN
EASTERN EMPIRE
CONSTANTINOPLE
Adrianople
ASIA MINOR
Smyrna
CRETE
Antioch
Damascus
Jerusalem
Bagdad
Alexandria
SYRIA
The ARABS under Mohammed conquer Persia and found the Empire of Bagdad.
The ARABS or SARACENS united by Mohammed proceed west and subjugate the north of Africa, Spain, Sardinia, Corsica, Sicily and the South of Italy. Under Abderam they over-ran France as far as the Loire and were defeated by Charles Martel in 732.
CORSICA
SARDINIA
BALEARES IS.
ROME
Ostia
SICILY
CARTHAGE
VANDALS
Route of the ARABS towards Spain.
SARACENS or MOORS
Strait of Gades
Carthago Nova
Barcelona
Narbonne
Toulouse
Tagus
Loire
Orleans
PARIS
Soissons
Cologne
Treves
Chalons
Metz
Strasbourg
Clermont
Arles
Rhine
Elbe
Vistula
Memel
Duna
Dnieper
Don
Volga
Danube
0
25
50
100
200
300
400



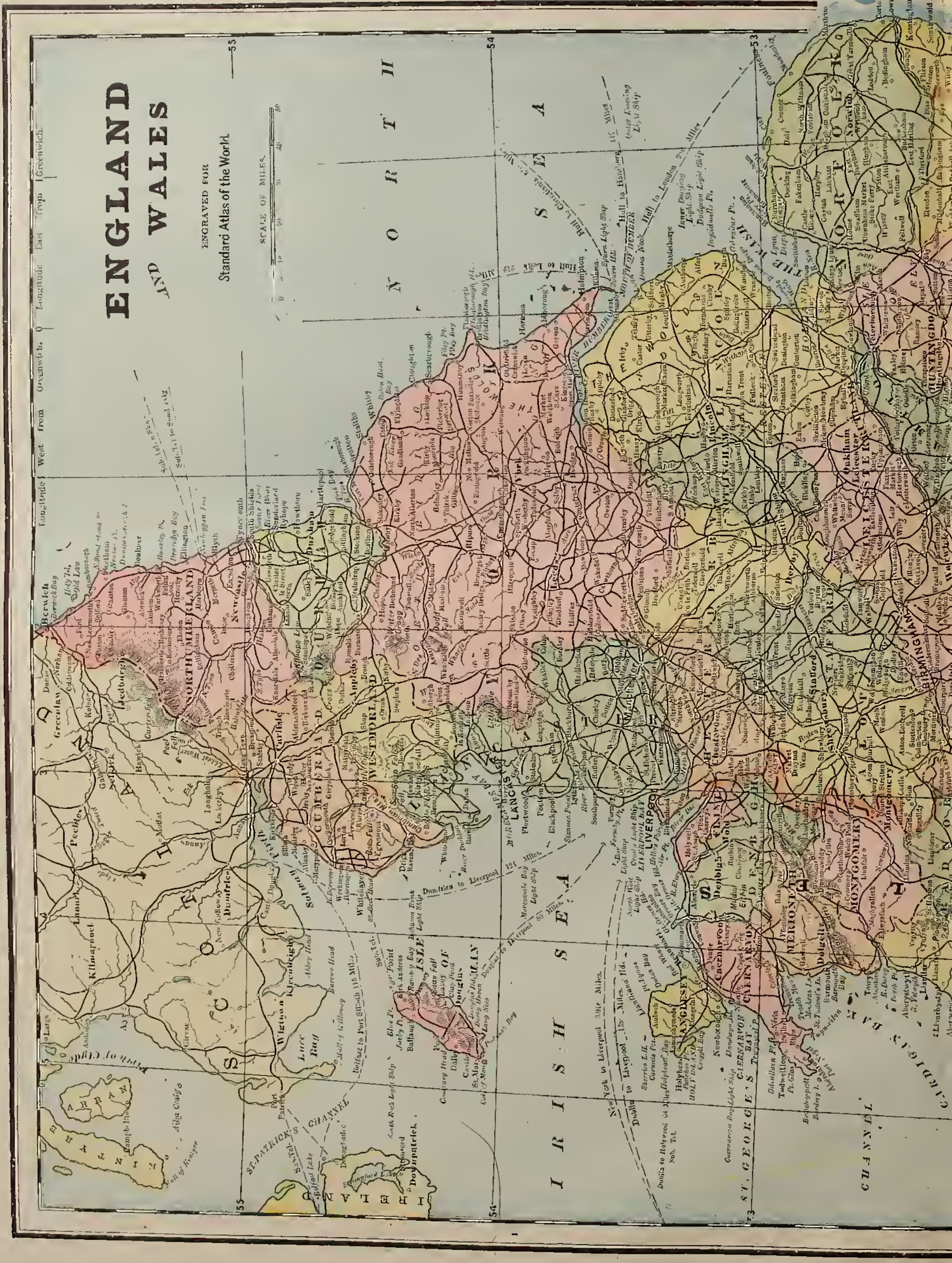
EUROPE
SCALE OF MILES
0 50 100 200 300 400
Population, 809,178,300.
Area, square miles, 3,822,320.
ARCTIC
Arctic Circle
ATLANTIC OCEAN
NORTH SEA
BAY OF BISCAY
MEDITERRANEAN SEA
AFRICA
ICELAND
BRITISH ISLES
IRELAND
SCOTLAND
ENGLAND
NORWAY
SWEDEN
DENMARK
HOLLAND
BELGIUM
FRANCE
SWITZERLAND
GERMAN EMPIRE
AUSTRIA
ITALY
SPAIN
PORTUGAL
SERVIA
MONTENEGRO
TURKEY
ENGLISH CHANNEL
ADRIATIC SEA
TYRRHENIAN SEA
LIGURIAN SEA
IONIAN SEA
BALTIC
BALEARIC ISLANDS
STRAIT of GIBRALTER
SICILY
SARDINIA
CORSICA
FAROE IS.
SHETLAND IS.
ORKNEY IS.
LOFODEN ISLANDS
LONDON
PARIS
BERLIN
VIENNA
MADRID
ROME
Lisbon
Stockholm
Edinburgh
Dublin
Copenhagen
Christiania
Brussels
Amsterdam
Berne
Naples
Hamburg
Munich
Marseilles
Lyons
Algiers
Tunis
Morocco

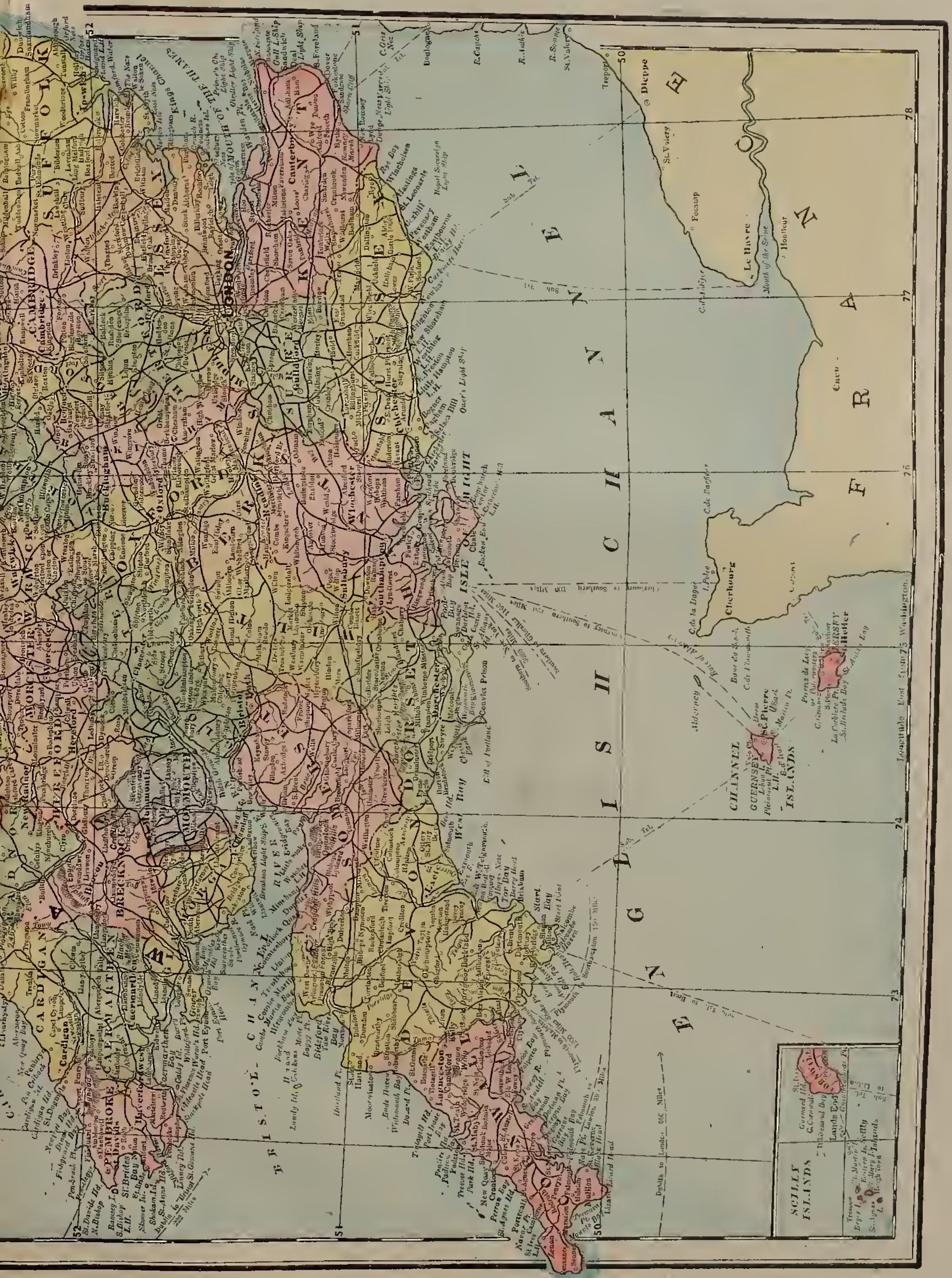

Longitude from 30° Greenwich
40°
50°
70° East
80°
O C E A N
WHITE SEA
BLACK SEA
SEA of AZOV
CRIMEA
CASPIAN SEA
ARAL SEA
ASIA
ASIA MINOR
TURKEY IN ASIA
PERSIA
TURKESTAN
RUSSIA
OBI RIVER
St. PETERSBURG
Moscow
Archangel
Kazan
Tobolsk
Orenburg
Astrakhan
Tiflis
CONSTANTINOPLE
SEA of MARMORA
Gulf of Finland
Lake Ladoga
Lake Onega
Volga
Ural Mts.
Mt. Ararat
Erzeroum
Teheran
Longitude East from Washington
107°
117°

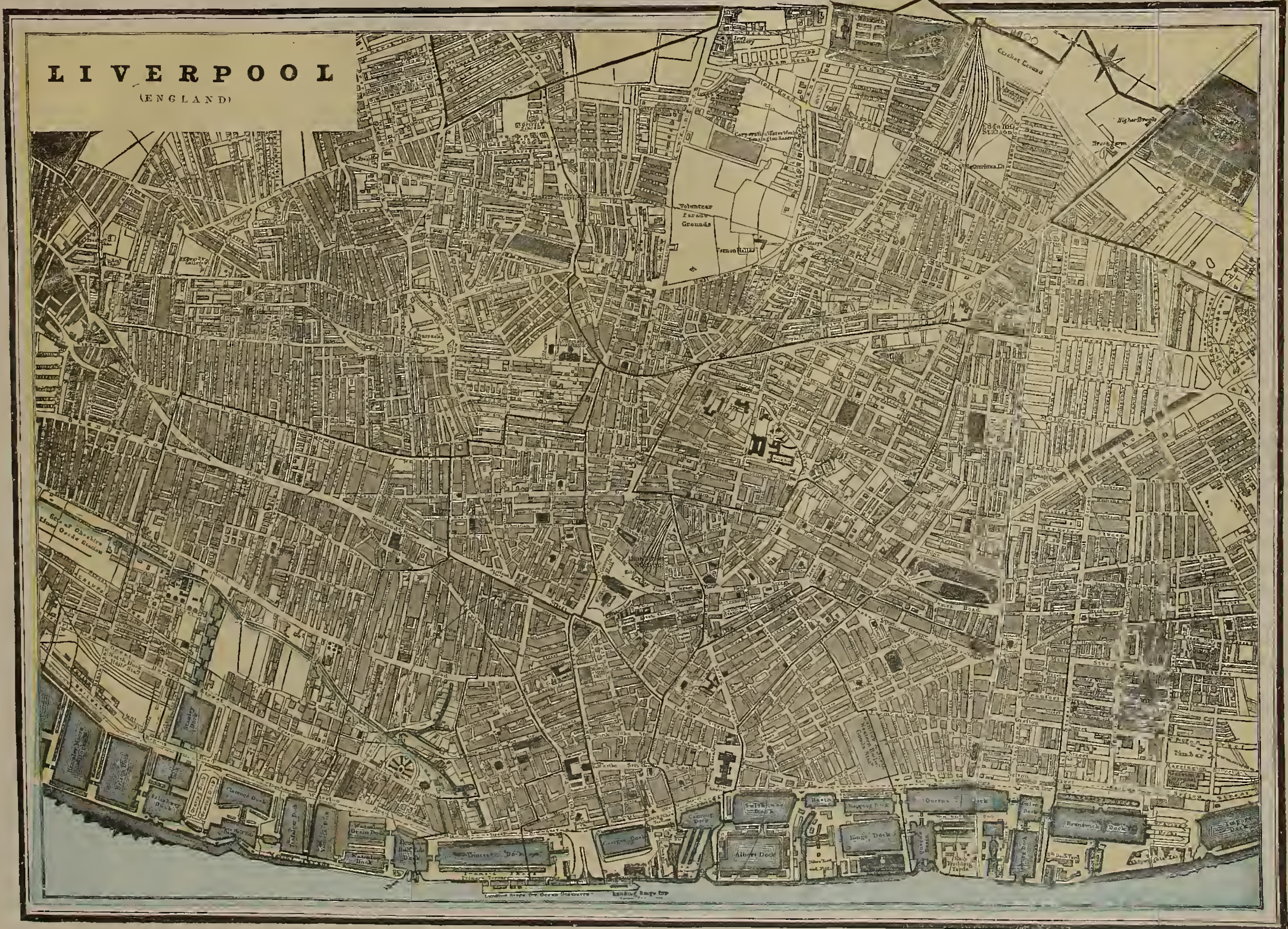


MAP SHOWING ROUTES OF VOYAGES AND DISCOVERIES. 861-1685.

NORTH ATLANTIC OCEAN
NORTH SEA
MEDITERRANEAN SEA
BAY OF BISCAY
BRITISH ISLES
SCOTLAND
ENGLAND
IRELAND
ENGLISH CHANNEL
NORWAY
SWEDEN
RUSSIA
GERMANY
AUSTRIA
ITALY
FRANCE
SPAIN
PORTUGAL
BELGIUM
HOLLAND
EUROPE
AFRICA
ICELAND
Mt. Hekla
GREENLAND
ARCTIC CIRCLE
DAVIS STRAIT
Frobisher's Strait
HUDSON'S STRAIT
HUDSON'S BAY
LABRADOR
BRITISH AMERICA
NORTH AMERICA
UNITED STATES
NEW FOUNDLAND
GULF OF ST. LAWRENCE
NEW BRUNSWICK
N. SCOTIA
Quebec
Montreal
L. Champlain
L. Ontario
L. Erie
L. Huron
L. Superior
L. Michigan
Mississippi
Rio
C. Farewell
Cape Cod
Delaware Bay
Chesapeake Bay
Cape Hatteras
Bermuda Is.
Azores
Madeiras
Canaries
Cape Finisterre
Str. of Gibraltar
Cape Blanco
Cape Verde Isl.
FLORIDA
St. Augustine
GULF OF MEXICO
MEXICO
YUCATAN
CENTRAL AMERICA
CUBA
San Domingo
Porto Rico
Bahama
San Salvador
WEST INDIES
CARIBBEAN SEA
Trinidad
R. Orinoco
Amazon R.
SOUTH AMERICA
TROPIC OF CANCER
EQUATOR
Naddoc 861
Lief Ericsson 1000
Hudson 1611
Frobisher 1576
Hudson 1609
Gosnold 1602
John Cabot 1497
Sebastian Cabot 1498
Cartier 1534
Corterreal 1501
Verrazzani 1524
Columbus 1492
Columbus 1498
Magellan 1519
De Gama 1498
Hudson 1610
De Ayllon 1520
De Leon 1512
De Soto 1539
De Narvaez
Cordova 1517
Grijalva 1518
Balboa 1510
Cortez 1519
La Salle 1685
La Salle
Vaca 1536
Sir Francis Drake 1579
Longitude 50 from 40 Greenwich
Longitude 27 from 37 Washington
East
West
60
50
40
30
20
10
0
100
90
80
70
97
87
77
67
57
47
17
7
3
13
23

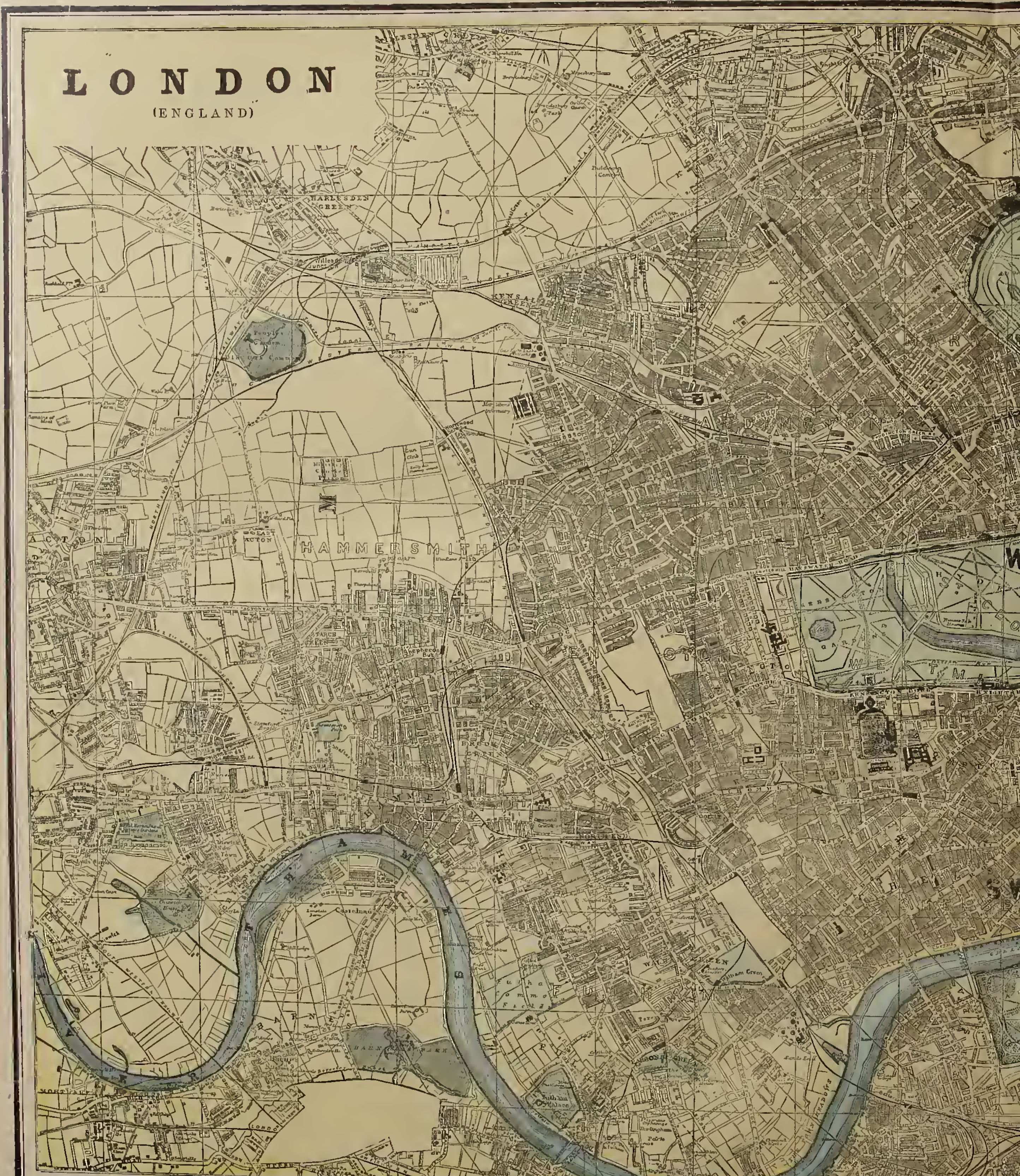

ENGLAND AND WALES
ENGRAVED FOR
Standard Atlas of the World.
SCALE OF MILES.
Longitude West from Greenwich 0 Longitude East from Greenwich
NORTH SEA
IRISH SEA
SCOTLAND
IRELAND
ST. PATRICK'S CHANNEL
ST. GEORGE'S CHANNEL
CARDIGAN BAY
ISLE OF MAN
NORTHUMBERLAND
CUMBERLAND
WESTMORLAND
DURHAM
YORK
LANCASTER
LINCOLN
NORFOLK
CHESTER
STAFFORD
DERBY
NOTTINGHAM
LEICESTER
FLINT
DENBIGH
CAERNARVON
ANGLESEY
MERIONETH
MONTGOMERY
SALOP
HUNTINGDON
BIRMINGHAM
LIVERPOOL
Newcastle
Carlisle
Berwick
Norwich
Dumfries
Douglas
Hull to London
New York to Liverpool 3014 Miles
Dublin to Liverpool 138 Miles
Belfast to Port Stranraer 115 Miles
Dumfries to Liverpool 121 Miles
55
54
53

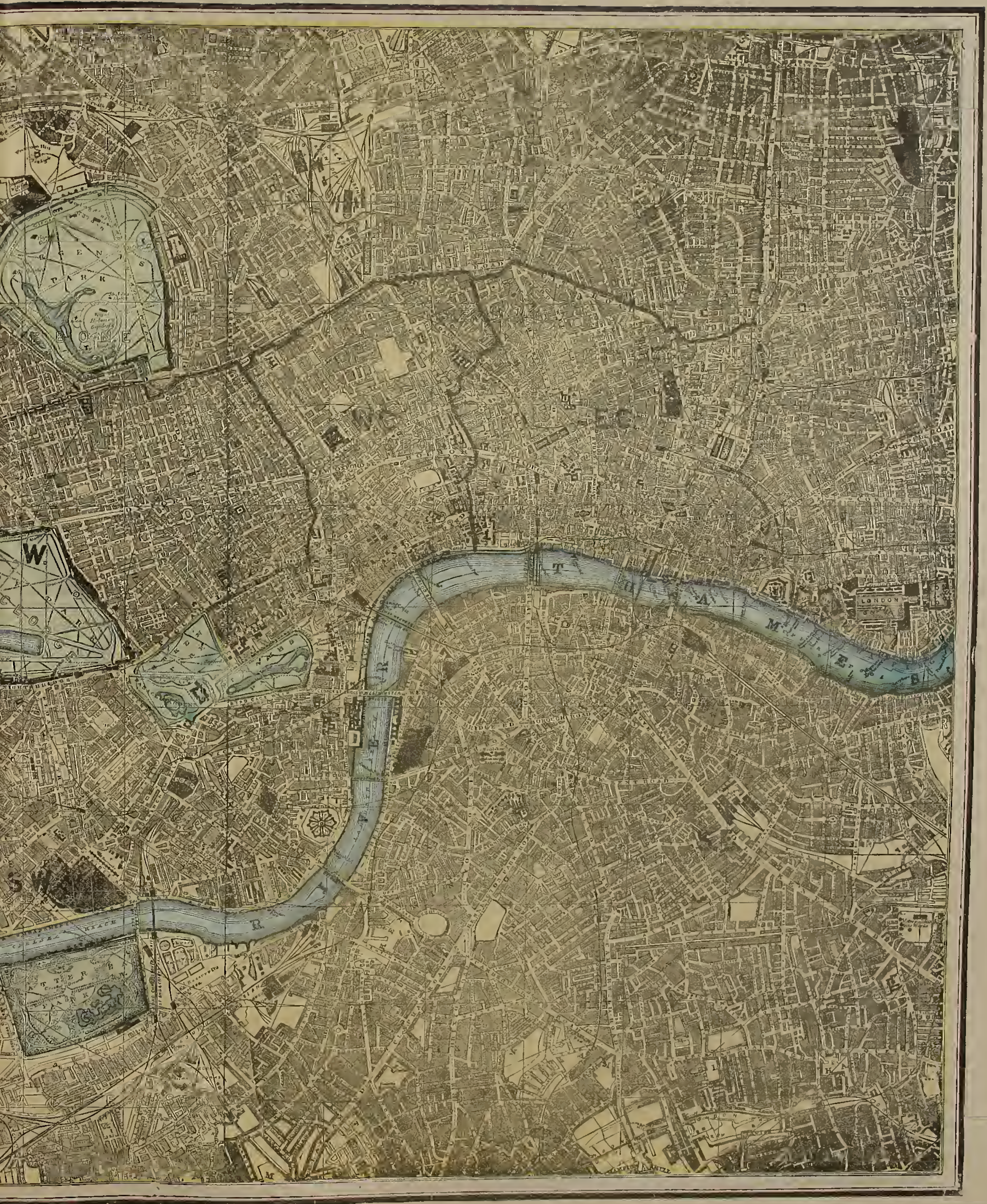

ENGLISH CHANNEL
FRANCE
BRISTOL CHANNEL
MOUTH OF THE THAMES
LONDON
ESSEX
SUFFOLK
CAMBRIDGE
KENT
SUSSEX
SURREY
HAMPSHIRE
ISLE OF WIGHT
DORSET
DEVON
CORNWALL
SOMERSET
CARDIGAN
PEMBROKE
CARMARTHEN
BRECKNOCK
GLAMORGAN
MONMOUTH
HEREFORD
WORCESTER
OXFORD
BUCKINGHAM
CHANNEL ISLANDS
Guernsey
Jersey
Alderney
Cherbourg
Le Havre
Dieppe
SCILLY ISLANDS
Longitude East from 75 Washington
72
73
74
75
76
77
78
50
51
52

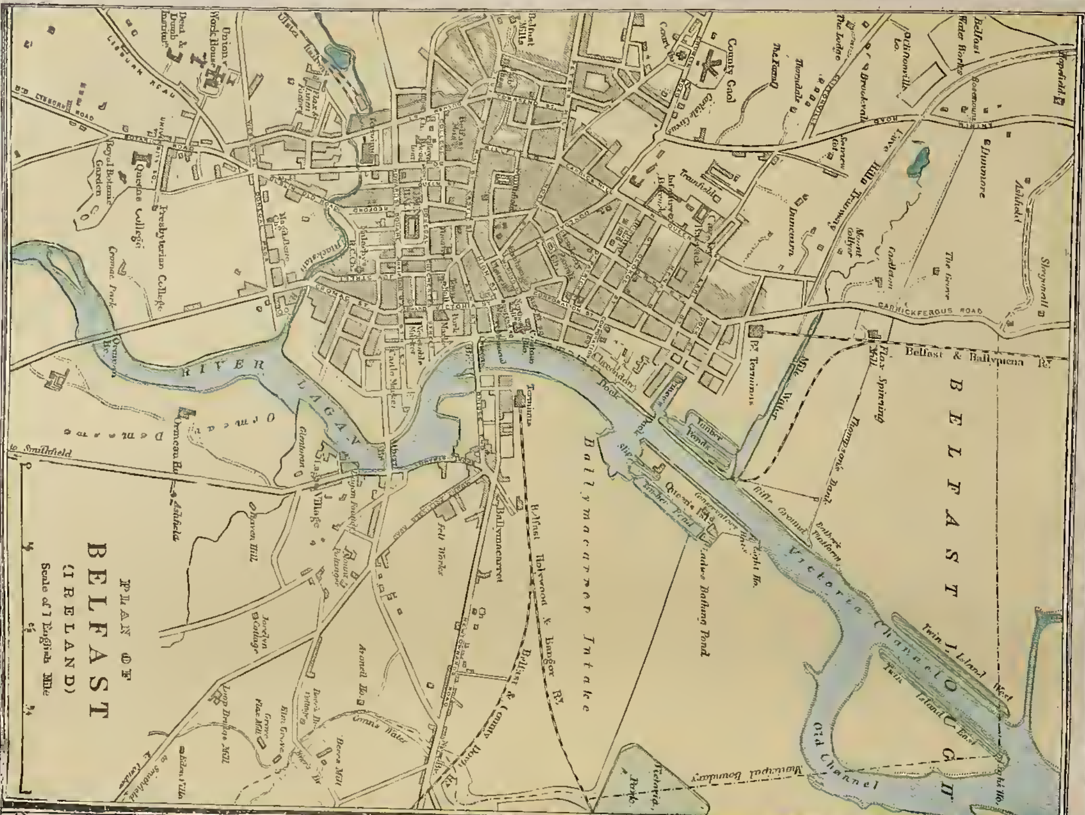

LIVERPOOL
(ENGLAND)
Volunteer Parade Grounds
Cricket Ground
Stanley Dock
Clarence Dock
Trafalgar Dock
Waterloo Grain Dock
Waterloo Dock
Princes Dock
Georges Dock
Canning Dock
Salthouse Dock
Basin
Wapping Dock
Albert Dock
Kings Dock
Queens Dock
Union Dock
Brunswick Dock
Ship Building Yards
Timber
Landing Stage for Ocean Steamers

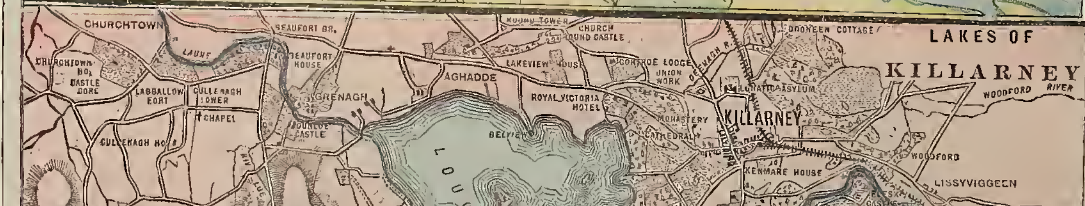
LONDON

(ENGLAND)

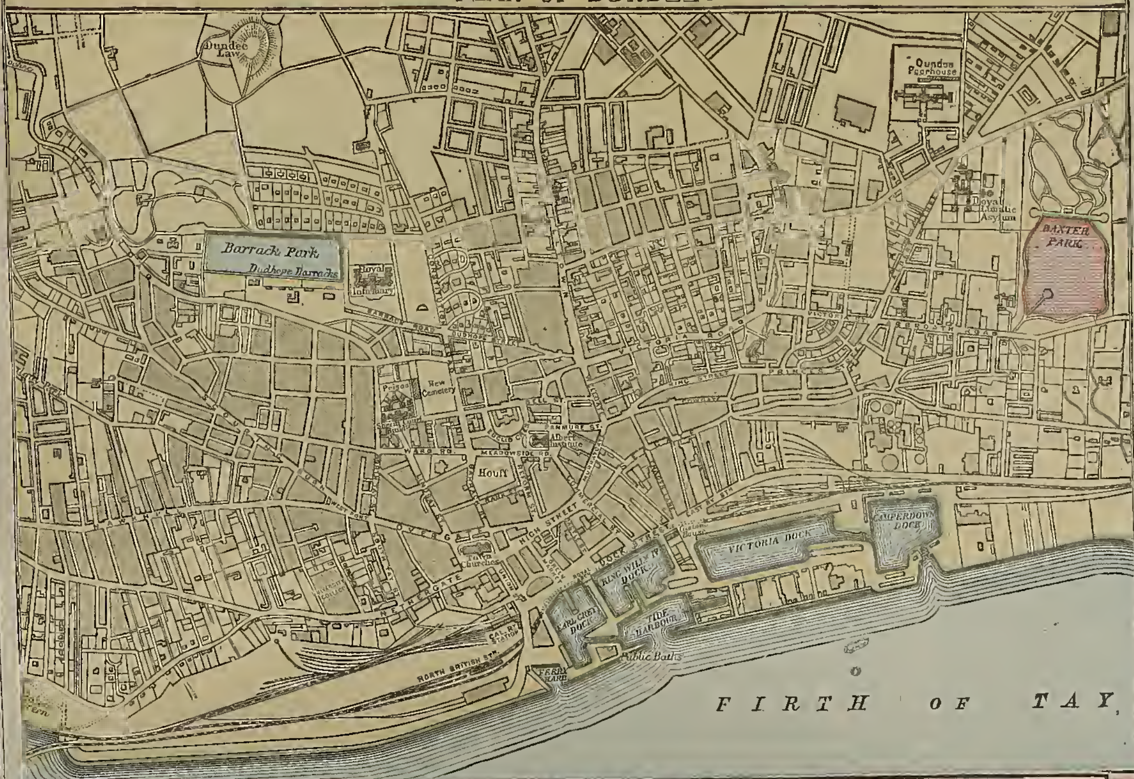

HARLESDEN GREEN
Willesden Junction
KENSAL GREEN
ACTON
EAST ACTON
HAMMERSMITH
SHEPHERDS BUSH
THAMES
Castelnau
BARNES
BARN ELMS PARK
Fulham Palace
PARSONS GREEN
WALHAM GREEN
Fulham Common Fields
MORTLAKE
HYDE PARK
KENSINGTON GARDENS
BAYSWATER ROAD

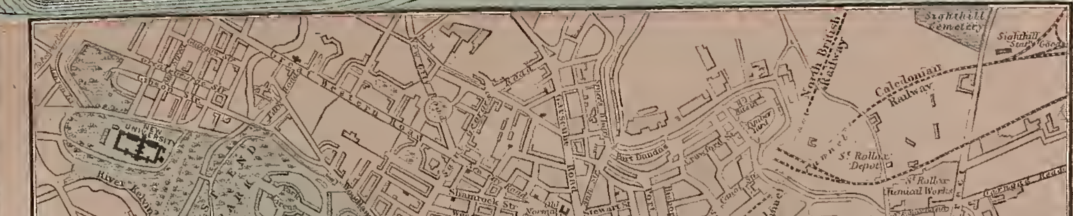

REGENTS PARK
W
W.C.
E.C.
THAMES
RIVER
LONDON
S.W.
BATTERSEA PARK

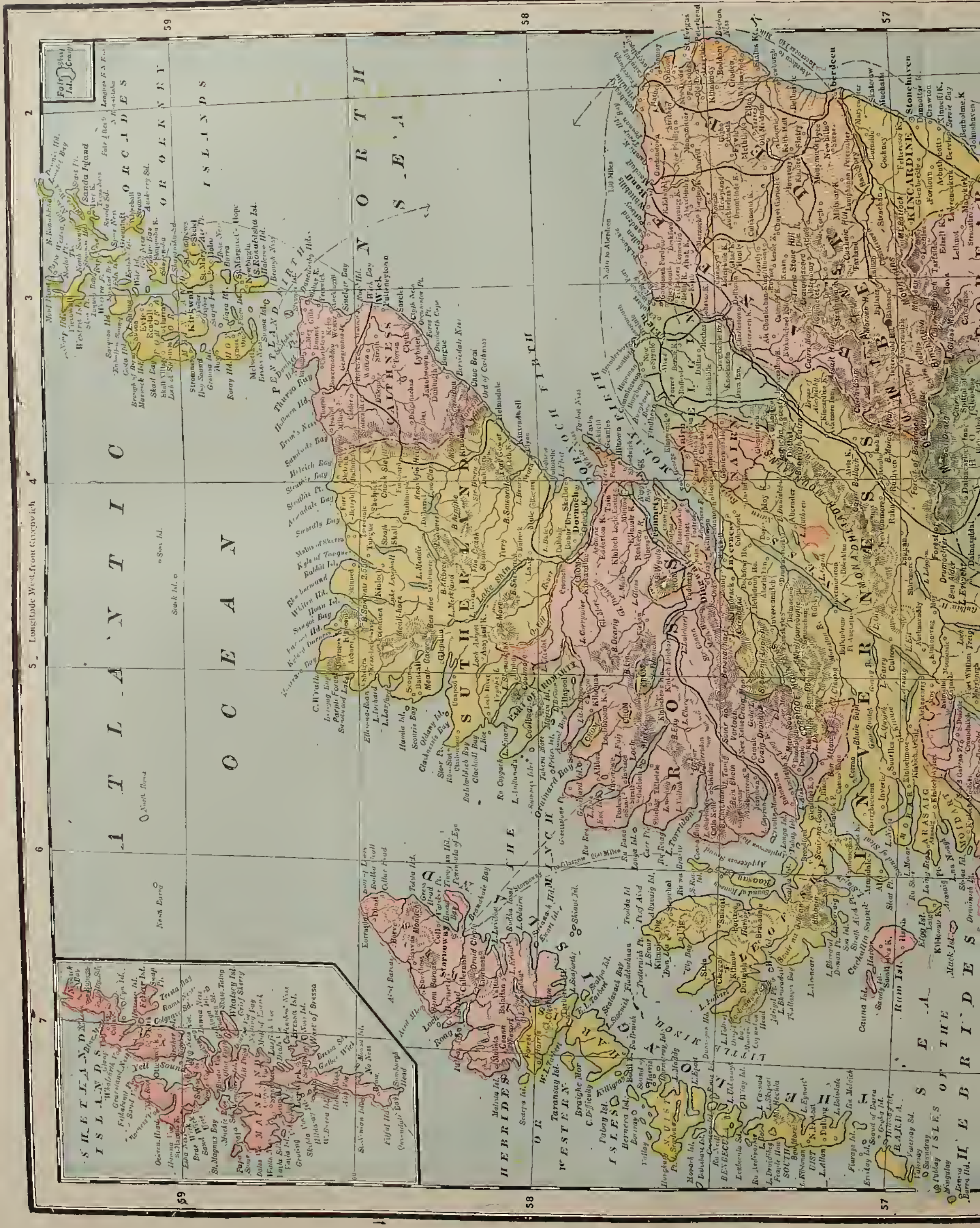

PLAN OF
BELFAST
(IRELAND)
Scale of 1 English Mile
RIVER LAGAN
BELFAST LOUGH
Victoria Channel
Old Channel
Twin Island West
Twin Island East
Ballymacarret Intake
Belfast & Ballymena Ry.
Belfast Holywood & Bangor Ry.
Belfast & County Down Ry.
Carrickfergus Road
Ormeau Demesne
Queens College
Presbyterian College
Royal Botanic Garden
Union Work House
County Gaol
Belfast Water Works
Ballymacarret
Flax Spinning Mill
Municipal Boundary
Ladies Bathing Pond
to Smithfield

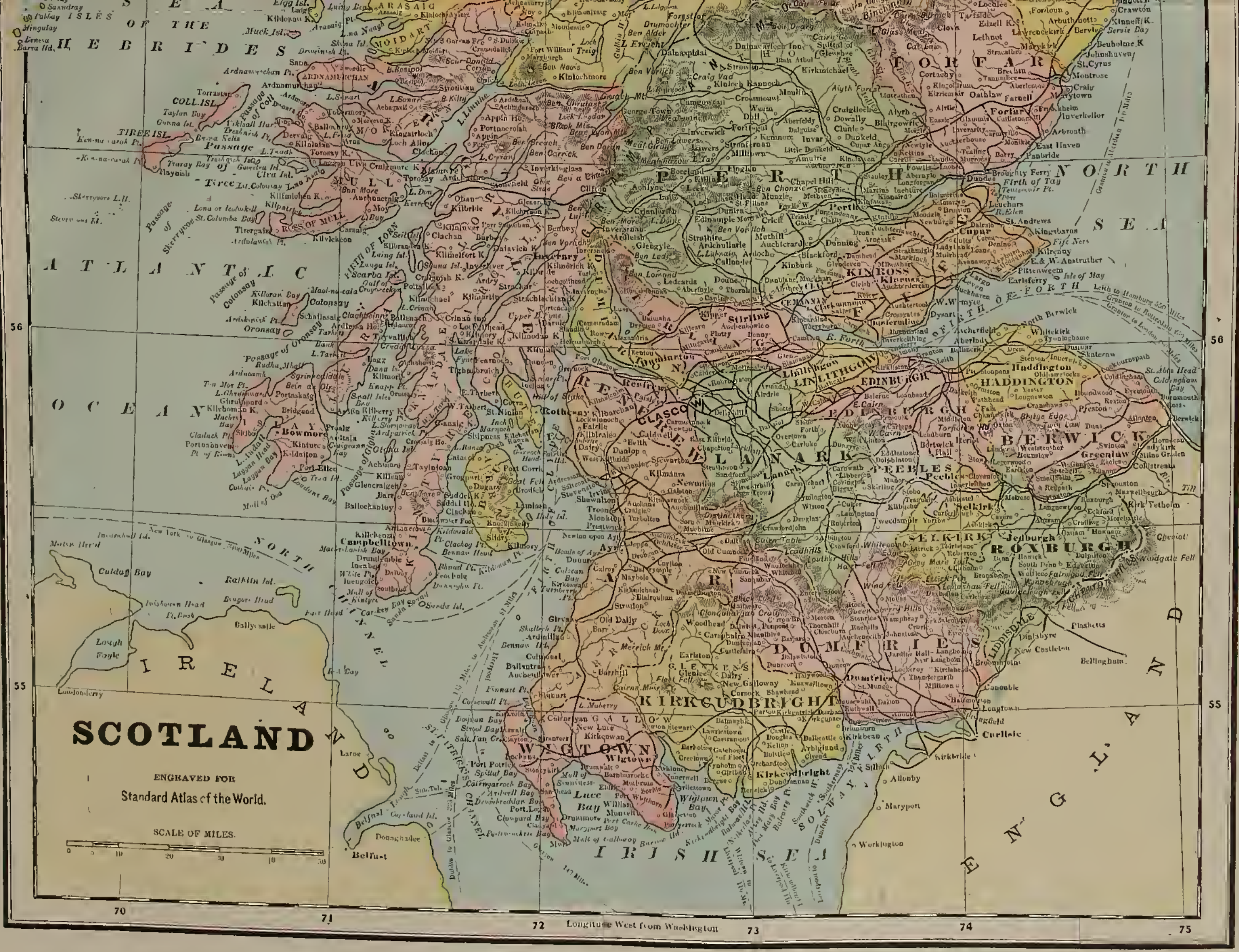

LAKES OF
KILLARNEY
CHURCHTOWN
BEAUFORT BR.
ROUND TOWER
CHURCH
DOONEEN COTTAGE
BEAUFORT HOUSE
LAKEVIEW HOUSE
AGHADDE
ROYAL VICTORIA HOTEL
LUNATIC ASYLUM
KILLARNEY
MONASTERY
CATHEDRAL
KENMARE HOUSE
WOODFORD RIVER
WOODFORD
LISSYVIGGEEN
GRENAGH
LOUGH LEANE
INNISFALLEN IS.
ROSS BAY
FLESK BRIDGE
CAHERNANE
LAKEVIEW HOTEL
RIVER FLESK
RAILWAY
CASTLELOUGH BAY
SULLIVANS CASCADE
TOMIES WOOD
TOMIES ROCK
TOMIES MT.
REEKS
MUCKROSS ABBEY
MUCKROSS LAKE
MEETING OF THE WATERS
OLD WEIR BRIDGE
EAGLES' NEST
TORC NEW BR.
TORC CASCADE
TORC MT.
FINOULAGH RIVER
FINOW
GARAGARRY
STOOMPA
GLENA
LORD BRANDONS COTTAGE
UPPER
CROMAGLAN MT.
DEVILS PUNCH BOWL
MANGERTON MT.
DERRYCUNIHY CASCADE
POLICE BARRACKS
GALWAYS BRIDGE
COOSAUNAGH L.
SCALE ENGLISH STATUTE MILES
FURLONGS
MILES

PLAN OF DUNDEE.


Dundee Law
Dundee Poorhouse
Royal Lunatic Asylum
BAXTER PARK
Barrack Park
Dudhope Barracks
Royal Infirmary
New Cemetery
Prison
MEADOWSIDE RD.
WARD RD.
PANMURE ST.
Albert Institute
Howff
HIGH STREET
OVERGATE
NETHERGATE
Town Churches
NORTH BRITISH STN.
CAL. RY. STATION
FERRY HARB.
EARL GREY DOCK
KING WILLIAM IV DOCK
TIDE HARBOUR
Public Baths
VICTORIA DOCK
CAMPERDOWN DOCK
FIRTH OF TAY

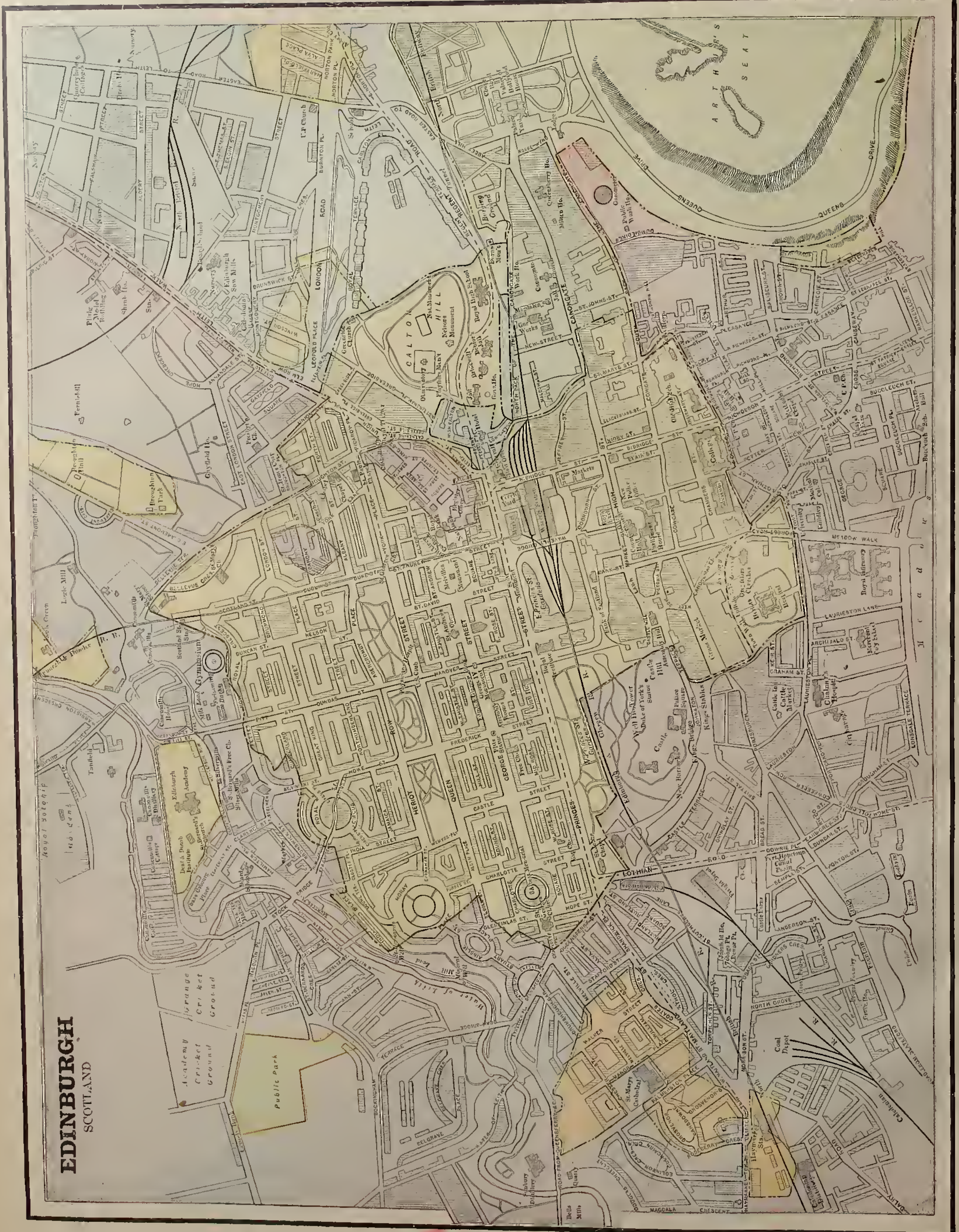

GLASGOW
(SCOTLAND)
Scale of Half a Mile
0 1 2 3 4 Furlongs
Sighthill Cemetery
Sighthill Stat. Goods
North British Railway
Caledonian Railway
St. Rollox Depot
St. Rollox Chemical Works
Port Dundas
NEW UNIVERSITY
River Kelvin
WEST END PARK
Fountain
Over Newton
Sauchiehall Str.
Berkeley Str.
St. Vincent Str.
George Street
Argyle Street
Trongate
Gallowgate
CENTRAL STATION
COLLEGE STATION
BUCHANAN ST. STAT.
Cathedral Str.
Stirling Road
Royal Infirmary
Blind Asylum
CATHEDRAL
NECROPOLIS
Monkland Canal
Goods Sta.
QUEENS DOCK
North Basin
South Basin
RIVER CLYDE
HARBOUR
Broomielaw
Anderston Quay
Lancefield Quay
GOVAN
Kingston Dock
Clyde Place
Paisley Road
Morrison Str.
Nelson Str.
Norfolk Str.
Cook Str.
Scotland Str.
Main Str.
CALEDONIAN SOUTH SIDE STATION
GLASGOW GREEN
The King's Park
London Str.


Longitude West from Greenwich
ATLANTIC OCEAN
NORTH SEA
ORKNEY ISLANDS
SHETLAND ISLANDS
Fair Isl.
PENTLAND FIRTH
CAITHNESS
SUTHERLAND
ROSS
INVERNESS
NAIRN
ELGIN
BANFF
ABERDEEN
KINCARDINE
Kirkwall
Thurso
Wick
Dornoch
Inverness
Aberdeen
Stornoway
WESTERN ISLES OF THE HEBRIDES
Skye
Rum Isl.
Eigg Isl.
MORAY FIRTH
59
58
57
2
3
4
5
6
7

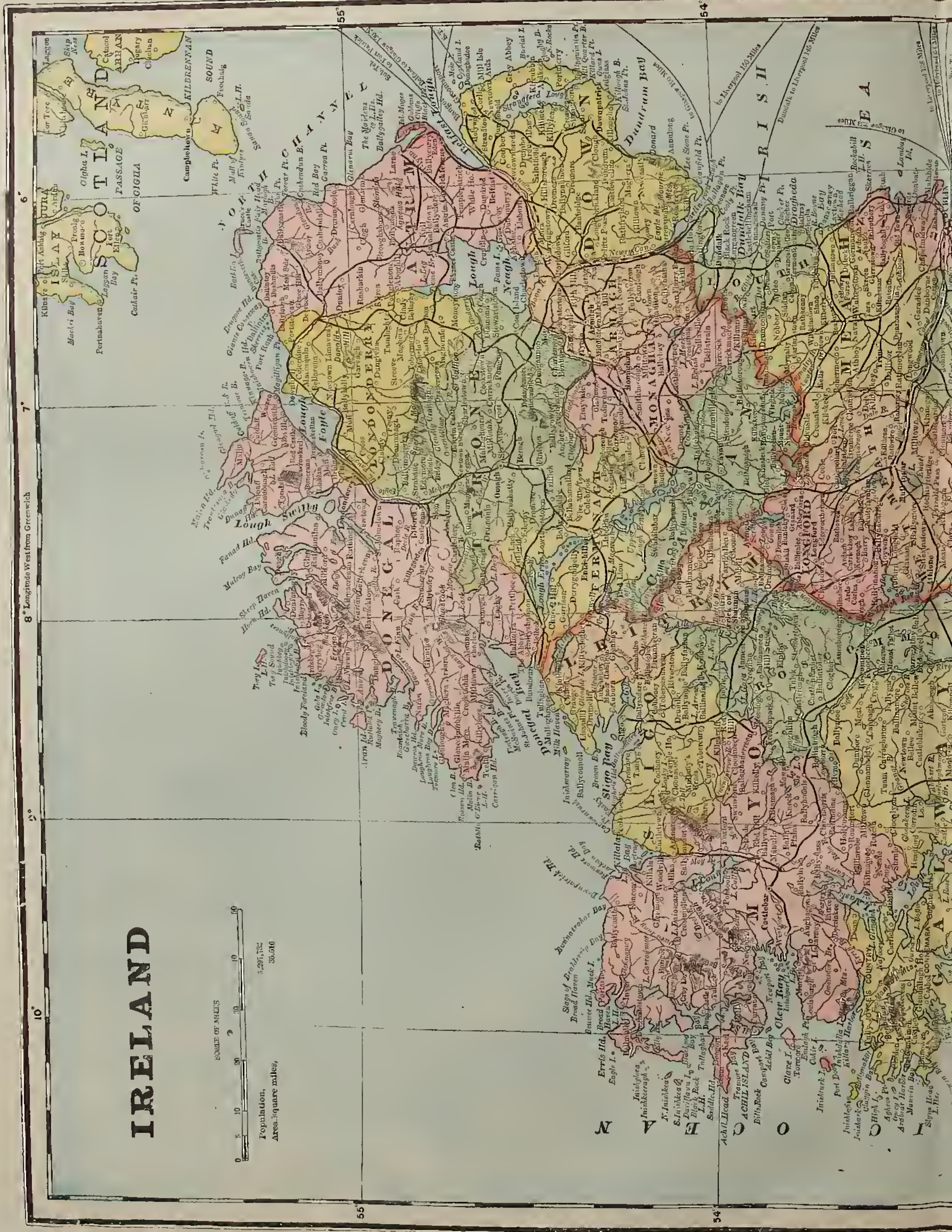

SCALE OF MILES.
Longitude West from Washington
ATLANTIC OCEAN
NORTH SEA
IRISH SEA
NORTH CHANNEL
FIRTH OF FORTH
ISLES OF THE HEBRIDES
IRELAND
ENGLAND
EDINBURGH
GLASGOW
FORFAR
PERTH
KINROSS
FIFE
STIRLING
LINLITHGOW
HADDINGTON
BERWICK
RENFREW
LANARK
PEEBLES
SELKIRK
ROXBURGH
AYR
DUMFRIES
KIRKCUDBRIGHT
WIGTOWN
MULL
COLL ISL.
TIREE ISL.
SOLWAY FIRTH
Belfast
Londonderry
Carlisle
Maryport
Workington

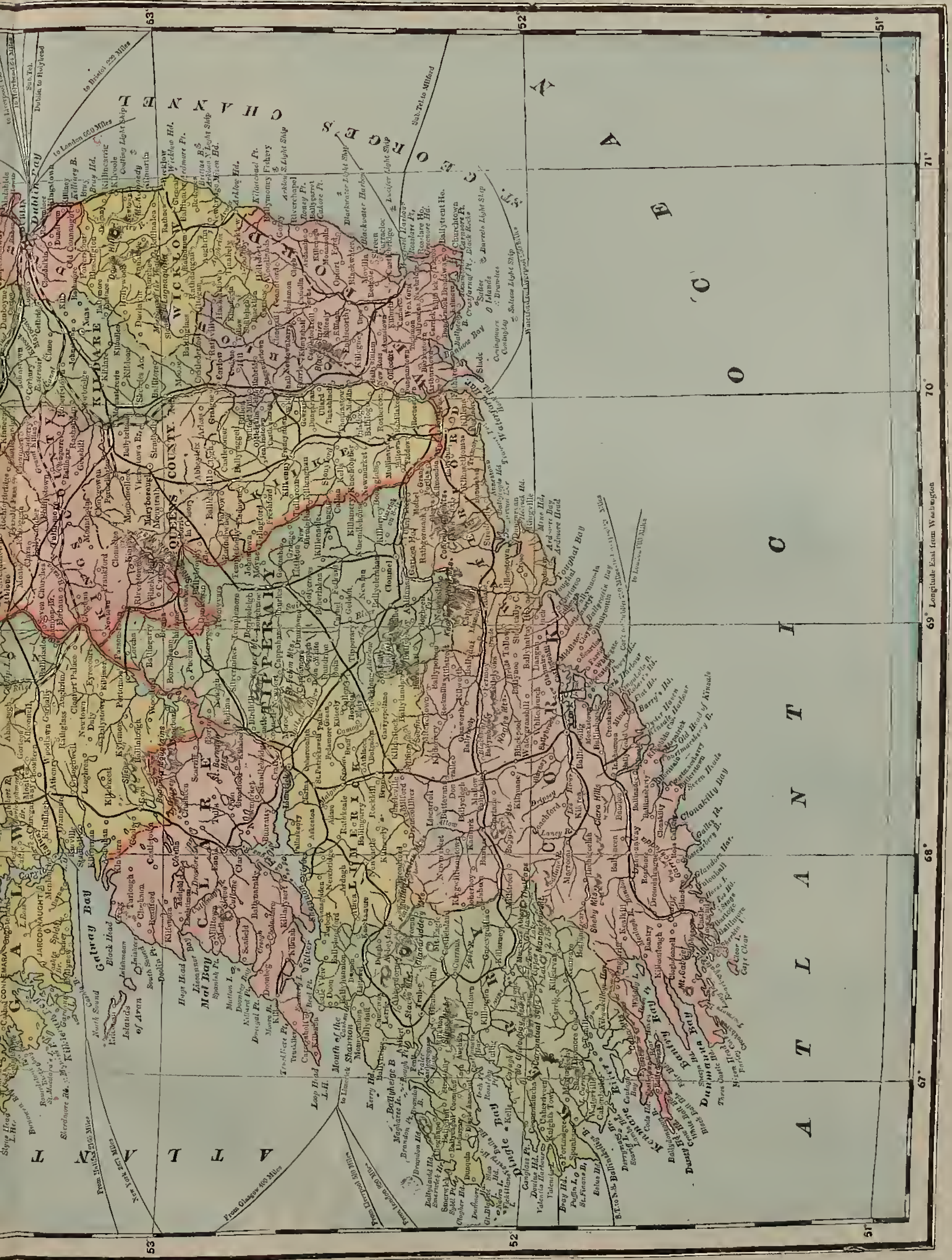
SCOTLAND

ENGRAVED FOR
Standard Atlas of the World.

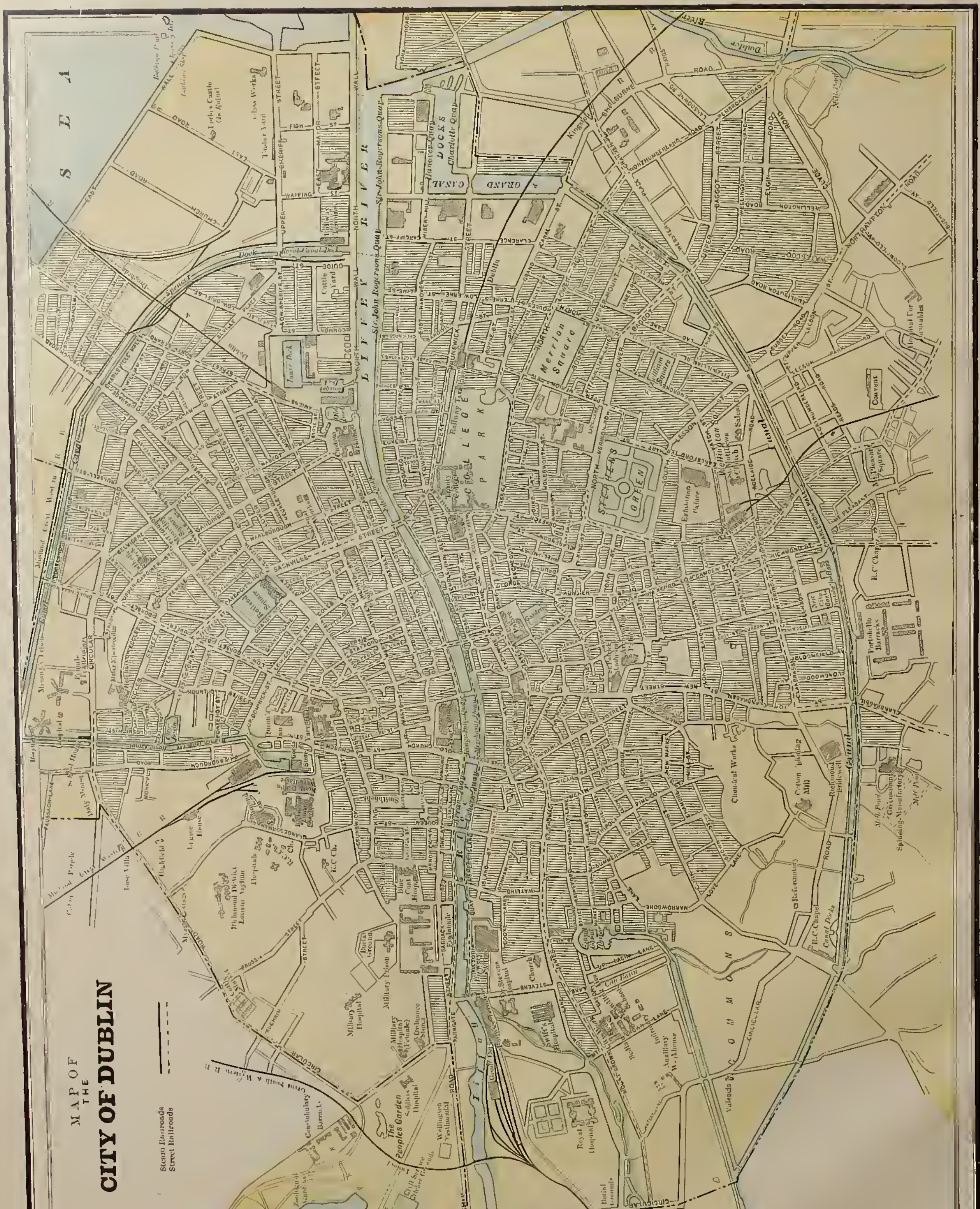

ARTHUR'S SEAT
QUEENS DRIVE
CALTON HILL
Nelson's Monument
Observatory
CANONGATE
HIGH ST.
COWGATE
PRINCES STREET
GEORGE STREET
QUEEN STREET
HERIOT ROW
ROYAL CIRCUS
MORAY PLACE
CHARLOTTE SQUARE
ST. ANDREW SQ.
Castle
Castle Hill
LOTHIAN ROAD
LEITH WALK
LONDON ROAD
EASTER ROAD
MEADOW WALK
Royal Infirmary
Water of Leith
Public Park
Academy Cricket Ground
Grange Cricket Ground
Edinburgh Academy
St. Mary's Cathedral
Haymarket Sta.
Coal Depot

EDINBURGH
SCOTLAND

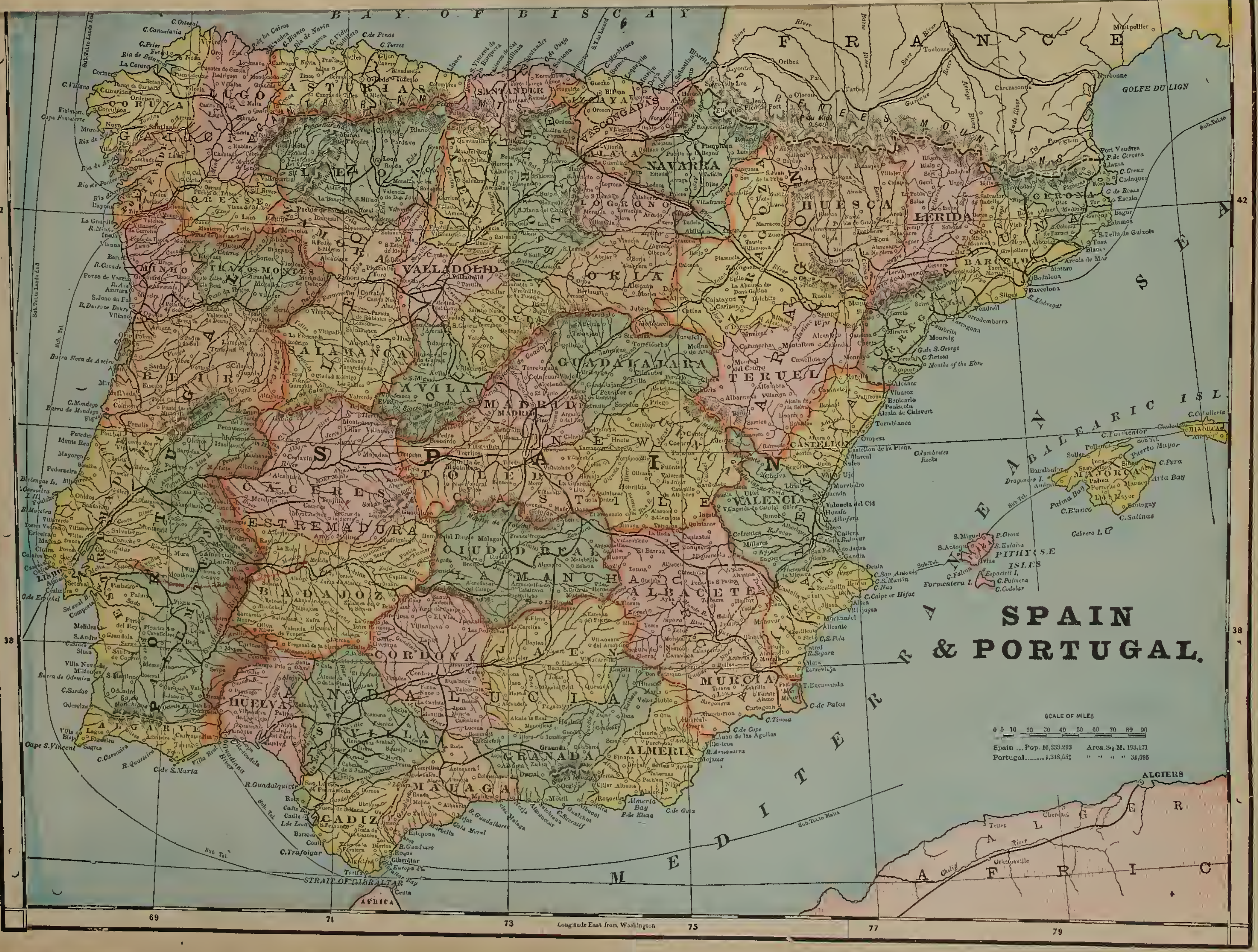

IRELAND
SCALE OF MILES
0 5 10 20 30 40 50
Population, [illegible]
Area, square miles, 35,510
8° Longitude West from Greenwich
SCOTLAND
NORTH CHANNEL
IRISH SEA
OCEAN
DONEGAL
LONDONDERRY
ANTRIM
TYRONE
DOWN
ARMAGH
MONAGHAN
FERMANAGH
LEITRIM
SLIGO
MAYO
LOUTH
MEATH
LONGFORD
Lough Neagh
Lough Foyle
Lough Swilly
Donegal Bay
Sligo Bay
Belfast Lough
Dundalk Bay
Dundrum Bay
55°
54°
6°
7°
8°
9°
10°

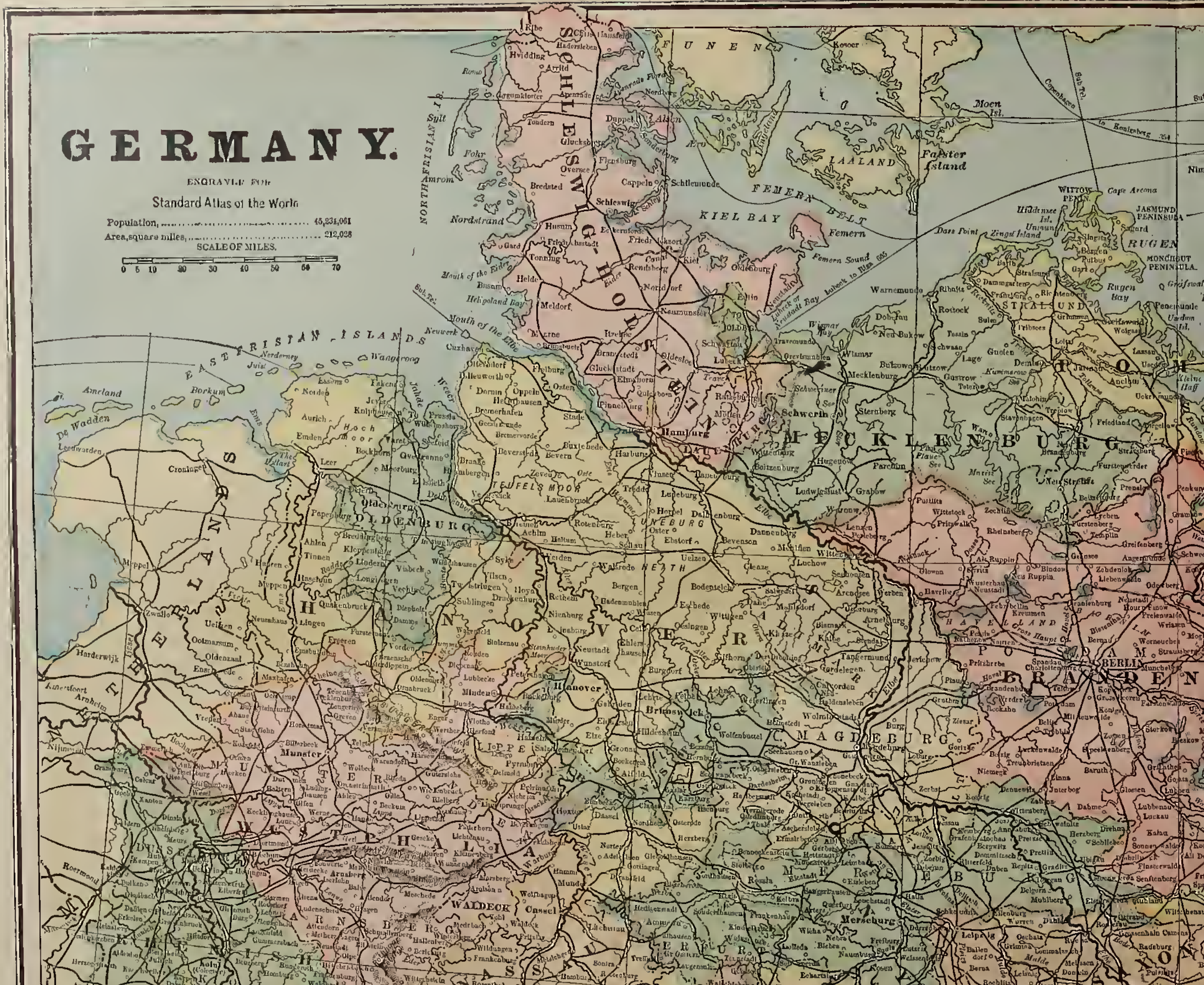


ATLANTIC OCEAN
ST. GEORGE'S CHANNEL
GALWAY
CLARE
LIMERICK
KERRY
CORK
TIPPERARY
WATERFORD
KILKENNY
QUEENS COUNTY
KILDARE
WICKLOW
WEXFORD
Galway Bay
Mouth of the Shannon
Dingle Bay
Bantry Bay
Dublin Bay
Youghal Bay
69° Longitude East from Washington
53°
52°
51°
67°
68°
69°
70°
71°



MAP OF
THE
CITY OF DUBLIN
Steam Railroads
Street Railroads
SEA
LIFFEY RIVER
DOCKS
GRAND CANAL
COLLEGE PARK
Merrion Square
STEPHENS GREEN
Rutland Square
Canal
COMMONS
The Peoples Garden
Royal Hospital
Zoological Gardens
Military Hospital
Portobello Barracks
Exhibition Palace
Trinity College
Dodder River


SPAIN & PORTUGAL.
SCALE OF MILES
0 5 10 20 30 40 50 60 70 80 90
Spain … Pop. 16,333,293 Area Sq.M. 193,171
Portugal …… 1,318,551 " " " 34,695
BAY OF BISCAY
FRANCE
GOLFE DU LION
PYRENEES MOUNTAINS
BALEARIC ISL.
PITHYUSE ISLES
MEDITERRANEAN SEA
ALGERIA
ALGIERS
AFRICA
STRAIT OF GIBRALTAR
Longitude East from Washington



GERMANY.

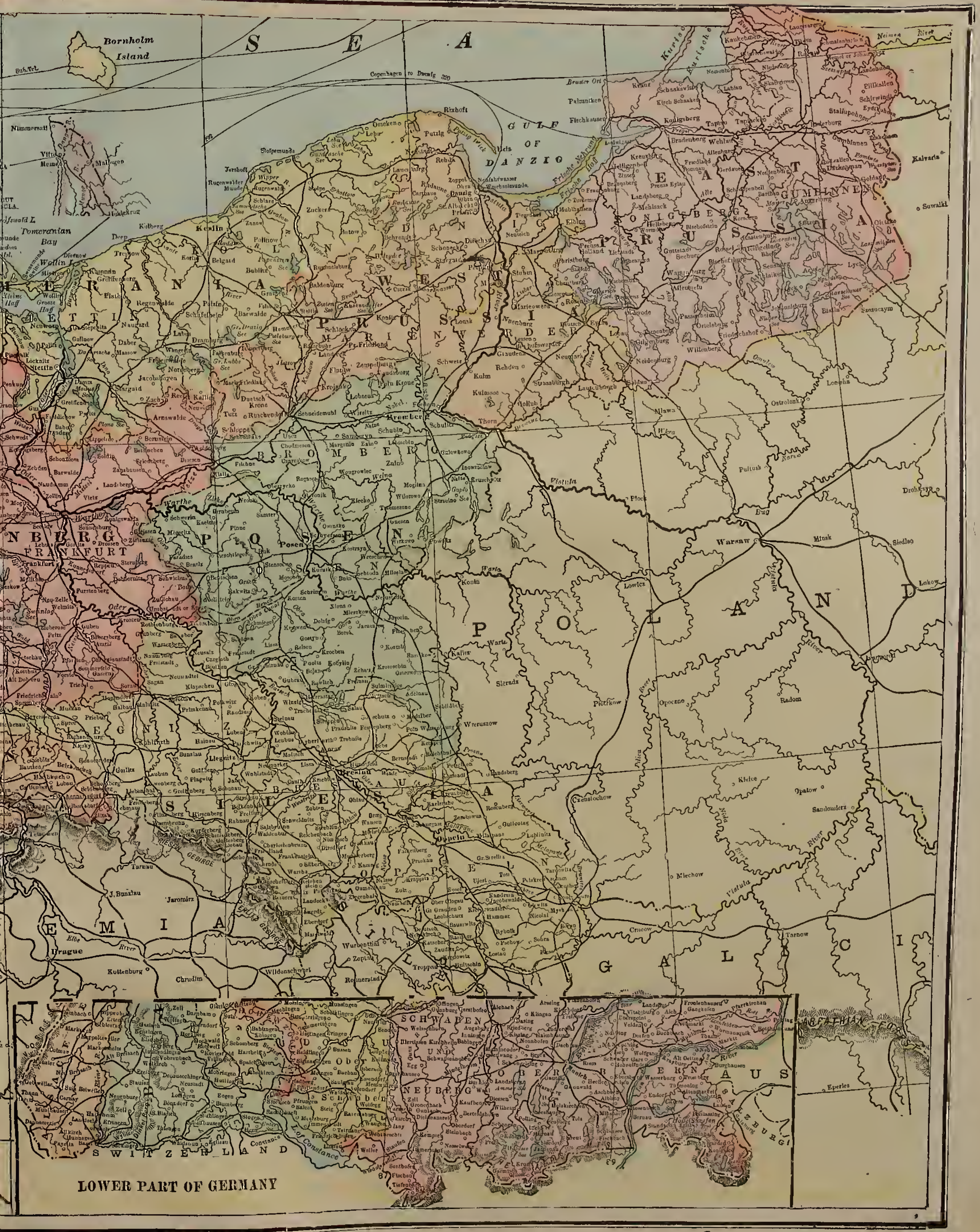
ENGRAVED FOR

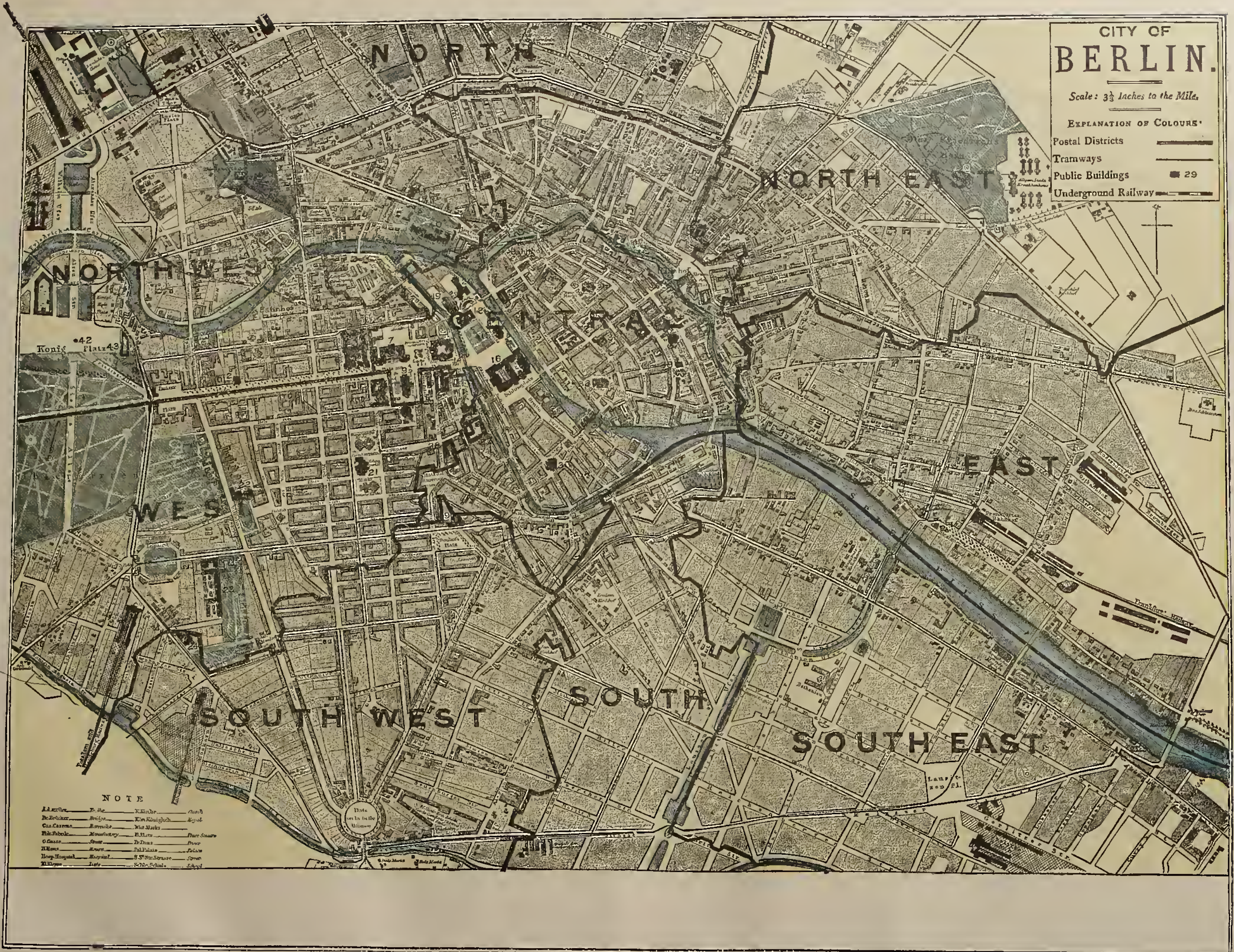
Standard Atlas of the World

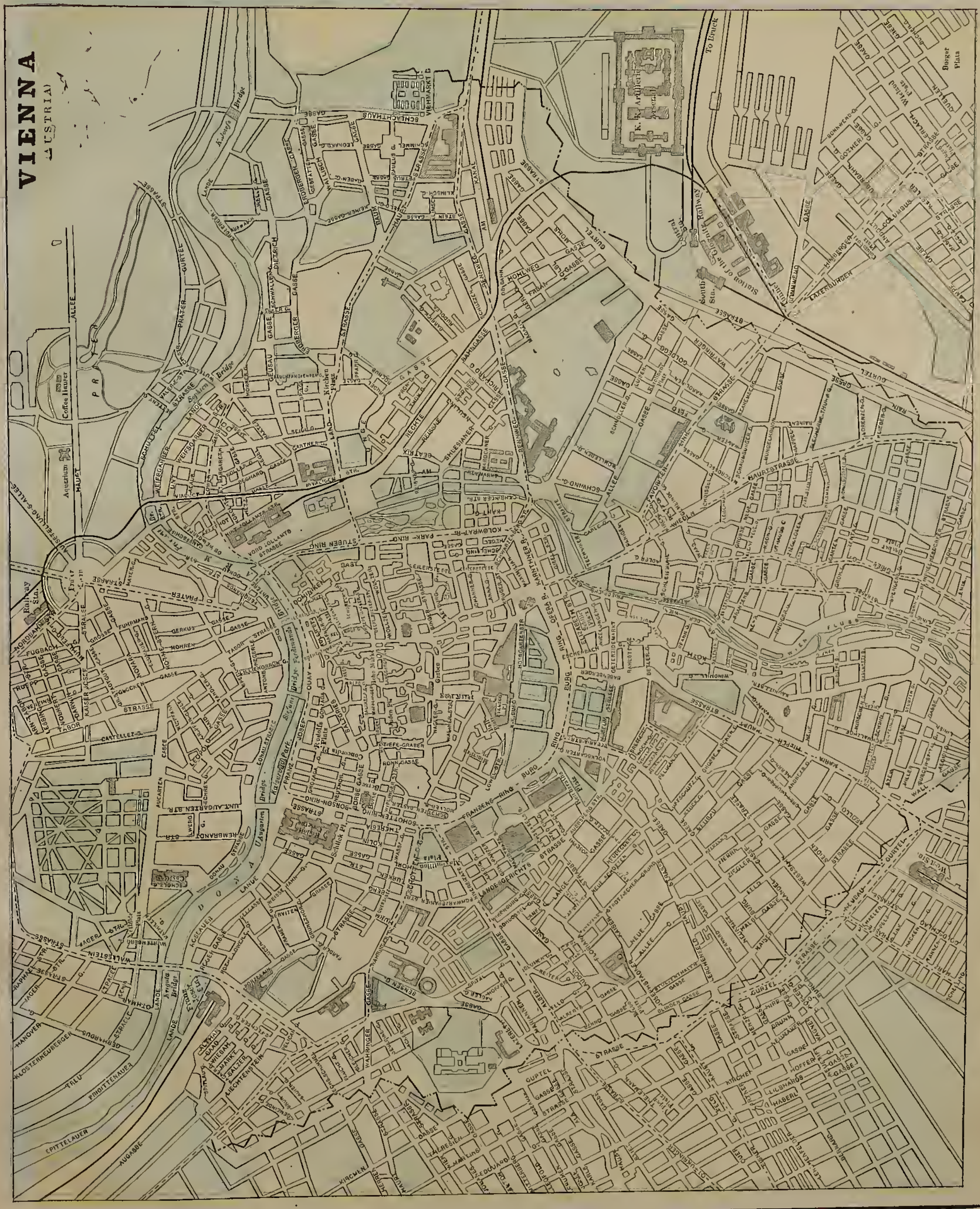
Population	45,234,061
Area, square miles	212,028

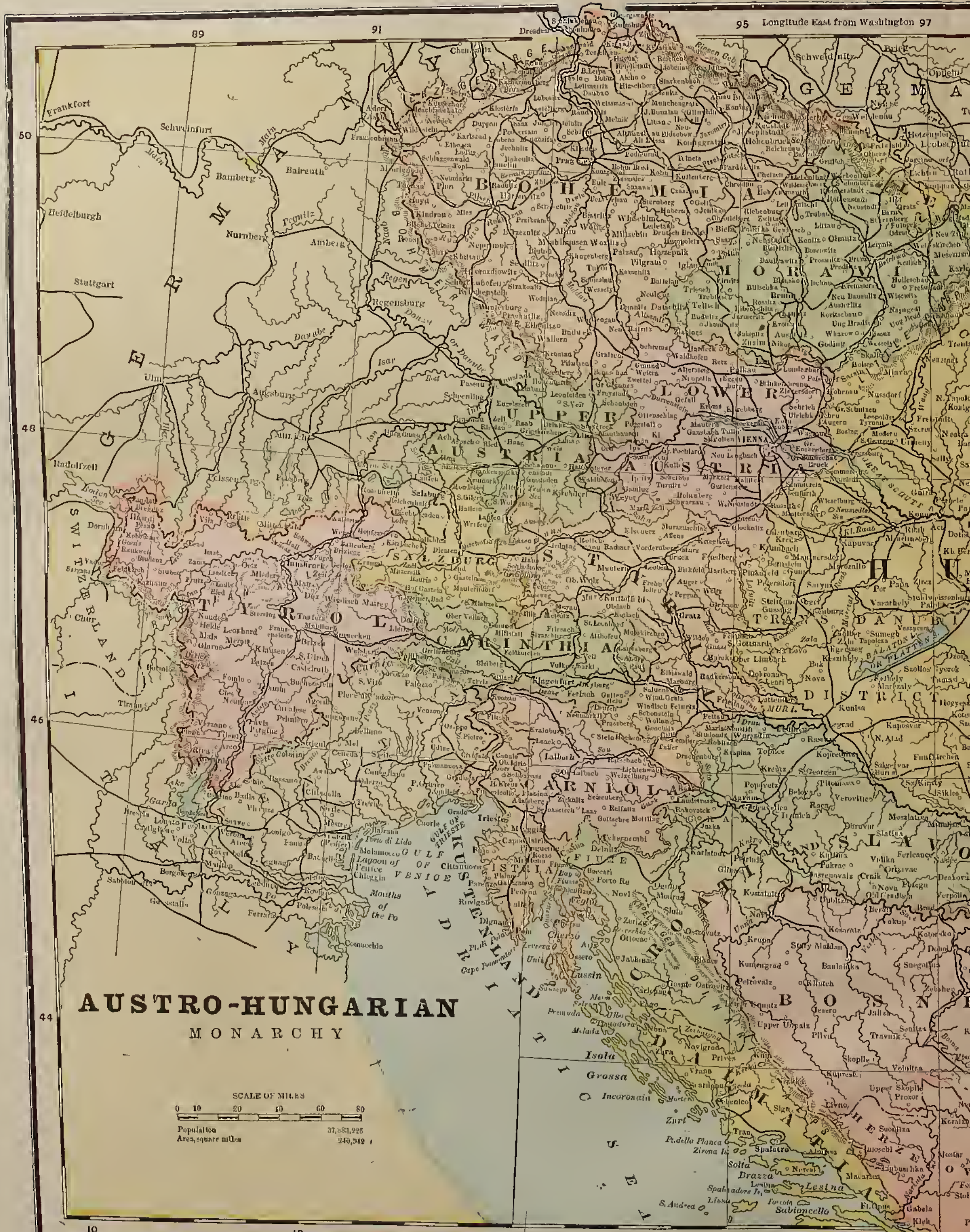
SCALE OF MILES.

0 5 10 20 30 40 50 60 70
FUNEN
SCHLESWIG HOLSTEIN
NORTH FRISIAN IS.
EAST FRISIAN ISLANDS
KIEL BAY
FEMERN BELT
LAALAND
Falster Island
Moen Isl.
RUGEN
Heligoland Bay
Mouth of the Elbe
Mouth of the Eider
MECKLENBURG
OLDENBURG
HANOVER
NETHERLANDS
BRANDENBURG
MAGDEBURG
WESTPHALIA
WALDECK
HESSE NASSAU
RHENISH PRUSSIA
WEIMAR
KINGDOM OF SAXONY
OBER FRANKEN
UNTER FRANKEN
MITTEL FRANKEN
OBER PFALZ
RHEIN HESSEN
RHEIN PFALZ
NECKAR
WURTEMBERG
BAVARIA
BOHEMIA
Hamburg
Hanover
Berlin
Munster
Cassel
Erfurt
Leipzig
Dresden
Frankfurt
Koln
Schwerin
Brunswick

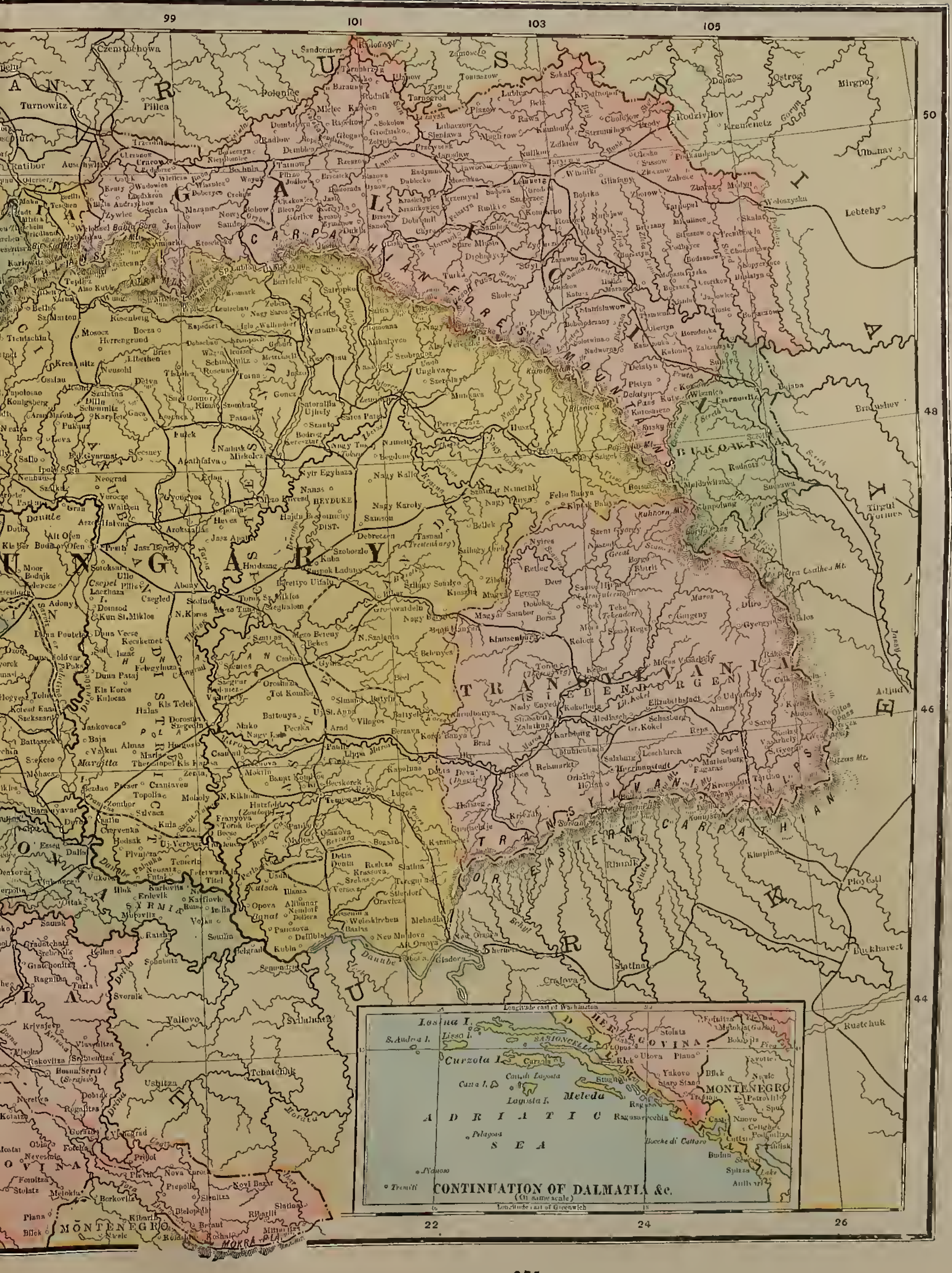

Bornholm Island
S E A
Copenhagen to Danzig
GULF OF DANZIG
Kurische Haff
Frische Nehrung
Frische Haff
Pomeranian Bay
Wollin I.
Stettin
Koslin
Kolberg
Stolpemunde
Danzig
Elbing
Konigsberg
Memel
Tilsit
Gumbinnen
Insterburg
Marienwerder
Bromberg
Thorn
Posen
Frankfurt
Breslau
Liegnitz
Oppeln
Warsaw
Vistula
Warthe
Oder
Bug
Narew
Pilica
Plock
Kalisz
Radom
Kielce
Opatow
Sandomierz
Lublin
Siedlce
Lukow
Kalvaria
Suwalki
Czenstochow
Miechow
Cracow
Tarnow
Eperles
Prague
Elbe
Kuttenburg
Chrudim
J. Bunzlau
Jaromirz
Troppau
Riesen Gebirge
Glatzer Gebirge
P O L A N D
G A L I C I
E M I A
P O S E N
B R O M B E R G
P O M E R A N I A
W E S T   P R U S S I A
E A S T   P R U S S I A
K O N I G S B E R G
G U M B I N N E N
M A R I E N W E R D E R
D A N Z I G
K O S L I N
S T E T T I N
F R A N K F U R T
L I E G N I T Z
B R E S L A U
O P P E L N
S I L E S I A
S C H W A B E N   U N D   N E U B U R G
O B E R   B A V A R I A
S A L Z B U R G
A U S
S W I T Z E R L A N D
Lake of Constance
C A R P A T H I A N
LOWER PART OF GERMANY

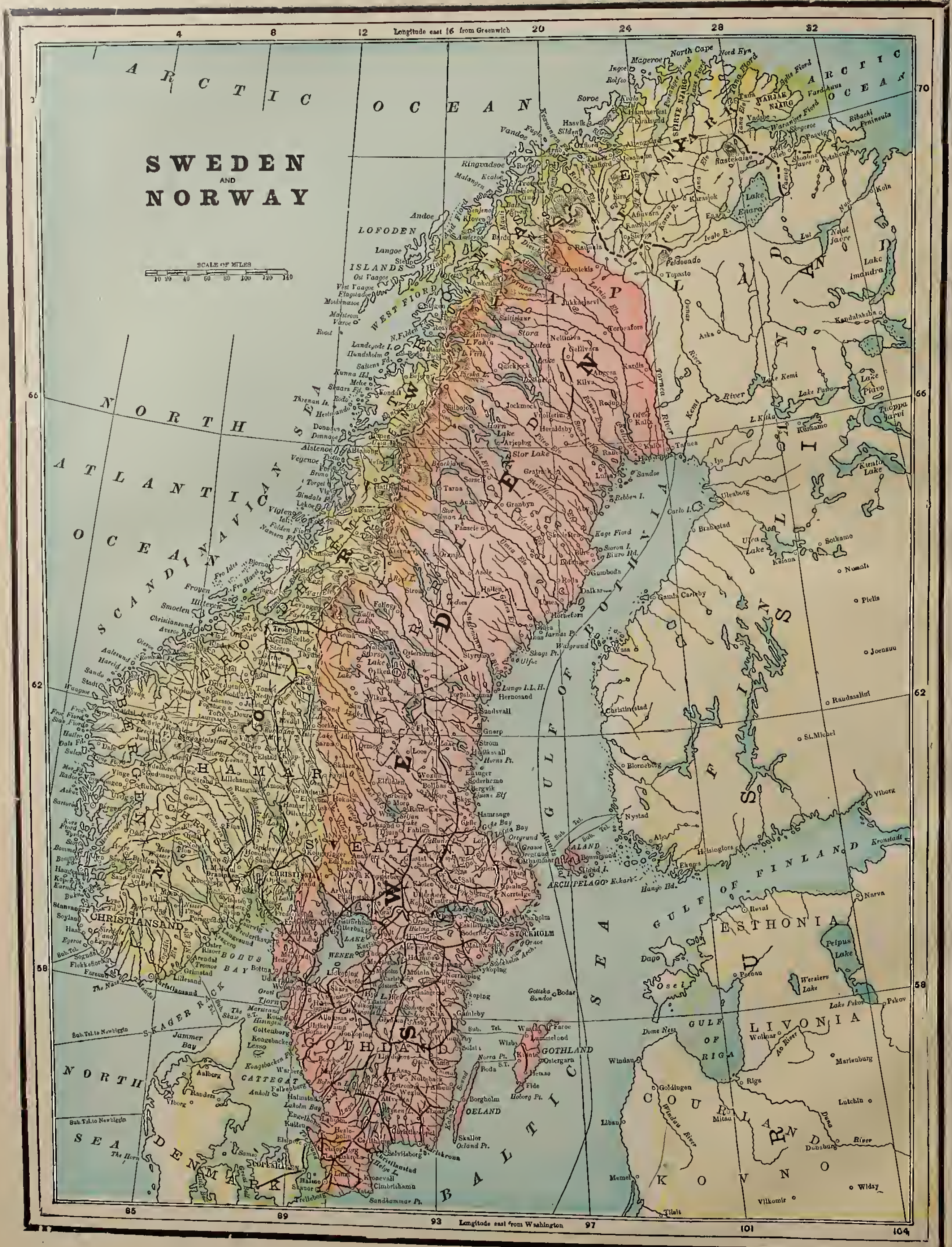

CITY OF
BERLIN.
Scale: 3⅓ Inches to the Mile.
Explanation of Colours.
Postal Districts
Tramways
Public Buildings
29
Underground Railway
NORTH
NORTH EAST
NORTH WEST
CENTRAL
EAST
WEST
SOUTH
SOUTH WEST
SOUTH EAST
Alexander Ufer
Wilhelm Ufer
König Platz
42
43
16
21
7
NOTE
A. Allee — Avenue — K. Kirche — Church
Br. Brücke — Bridge — Kn. Königlich — Royal
Cas. Caserne — Barracks — Mkt. Markt
Fab. Fabrik — Manufactory — Pl. Platz — Place Square
G. Gasse — Street — Th. Thor — Door
H. Haus — House — Pal. Palais — Palace
Hosp. Hospital — Hospital — S. Str. Strasse — Street
I. Insel — Isle — Schle. Schule — School

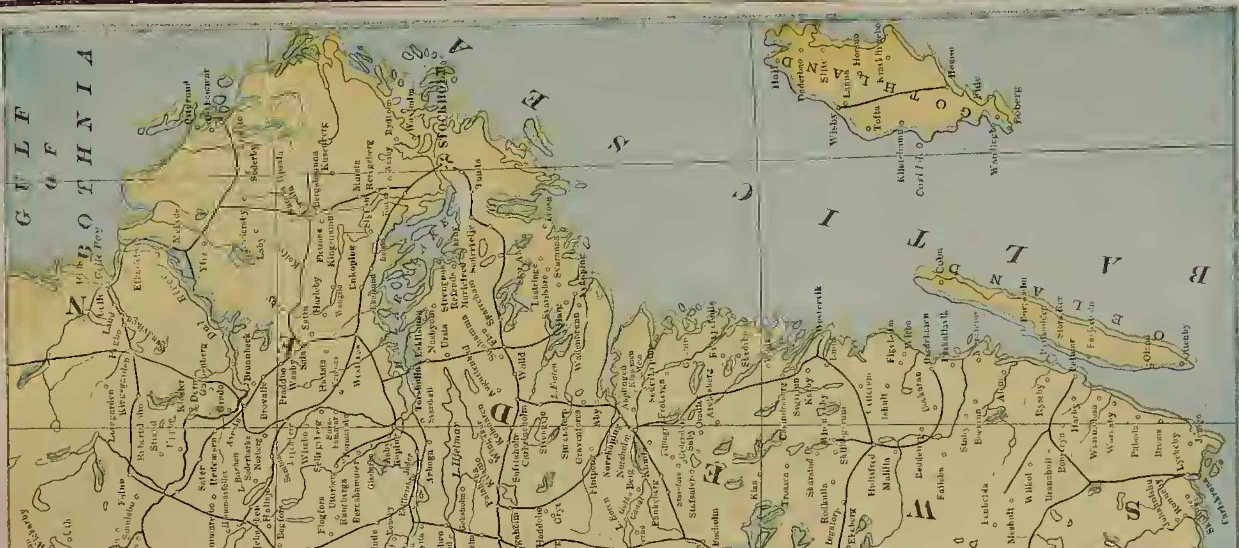

VIENNA
(AUSTRIA)
Coffee Hauser
Aquarium
PRATER
HAUPT ALLEE
Railway Sta.
NORDBAHN
K. Josefs Bridge
Sophien Bridge
Aspern Bridge
Ferdinands Bridge
Karl Park
Augarten Bridge
Rudolfs Park
Friedensbrücke Bridge
Kettensteg Bridge
DONAU
WIEN FLUSS
STUBEN RING
KOLOWRAT RING
PARK RING
KARNTHNER R.
OPERA R.
BURG RING
FRANZENS RING
SCHOTTEN RING
BÖRSEN RING
LANDSTRASSE
SCHWARZENBERG
WIEDNER HAUPTSTRASSE
MARIAHILFER STRASSE
GÜRTEL
WÄHRINGER STRASSE
LICHTENSTEIN STR.
Votiv Kirche
Schotten Kirche
Rathaus
K. K. Artillerie Arsenal
To Bruck
Station of the Raab Railway
South Sta.
West Sta.
BÜRGER Platz
LAXENBURGER
HOHLWEG
RENNWEG
UNGARGASSE
AUGARTEN
EPITTELAUER
AUGASSE
KIRCHEN
BURG GASSE
NEUSTIFT G.
ZIEGLER GASSE

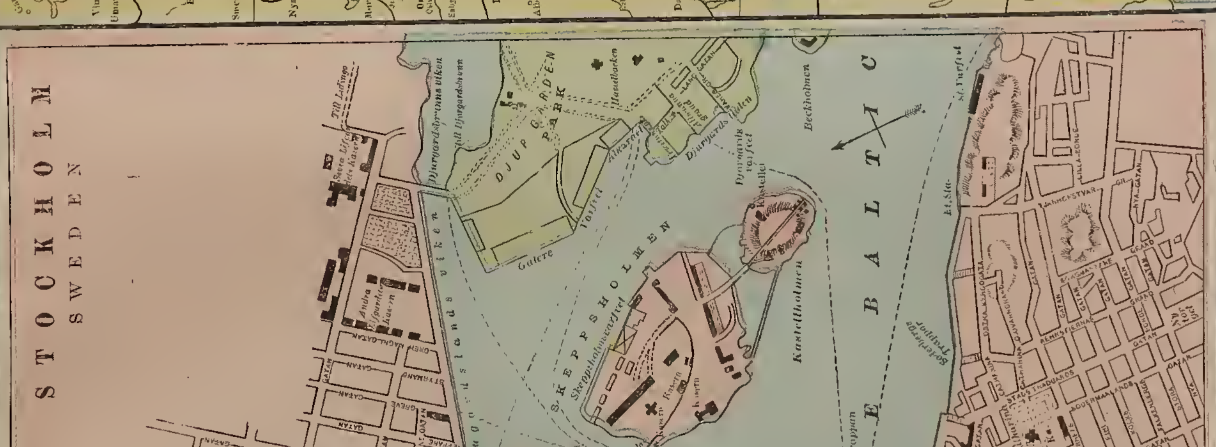

AUSTRO-HUNGARIAN
MONARCHY
SCALE OF MILES
0 10 20 40 60 80
Population 37,881,226
Area, square miles 240,942
Longitude East from Washington
Longitude East from Greenwich
GERMANY
SWITZERLAND
ITALY
BOHEMIA
MORAVIA
UPPER AUSTRIA
LOWER AUSTRIA
SALZBURG
TYROL
CARINTHIA
STYRIA
CARNIOLA
KUSTENLAND
ISTRIA
CROATIA
DALMATIA
SLAVONIA
BOSNIA
HERZEGOVINA
HUNGARY
TRANS DANUBE DISTRICT
VIENNA
GULF OF VENICE
GULF OF TRIESTE
ADRIATIC SEA
Mouths of the Po
Isola Grossa

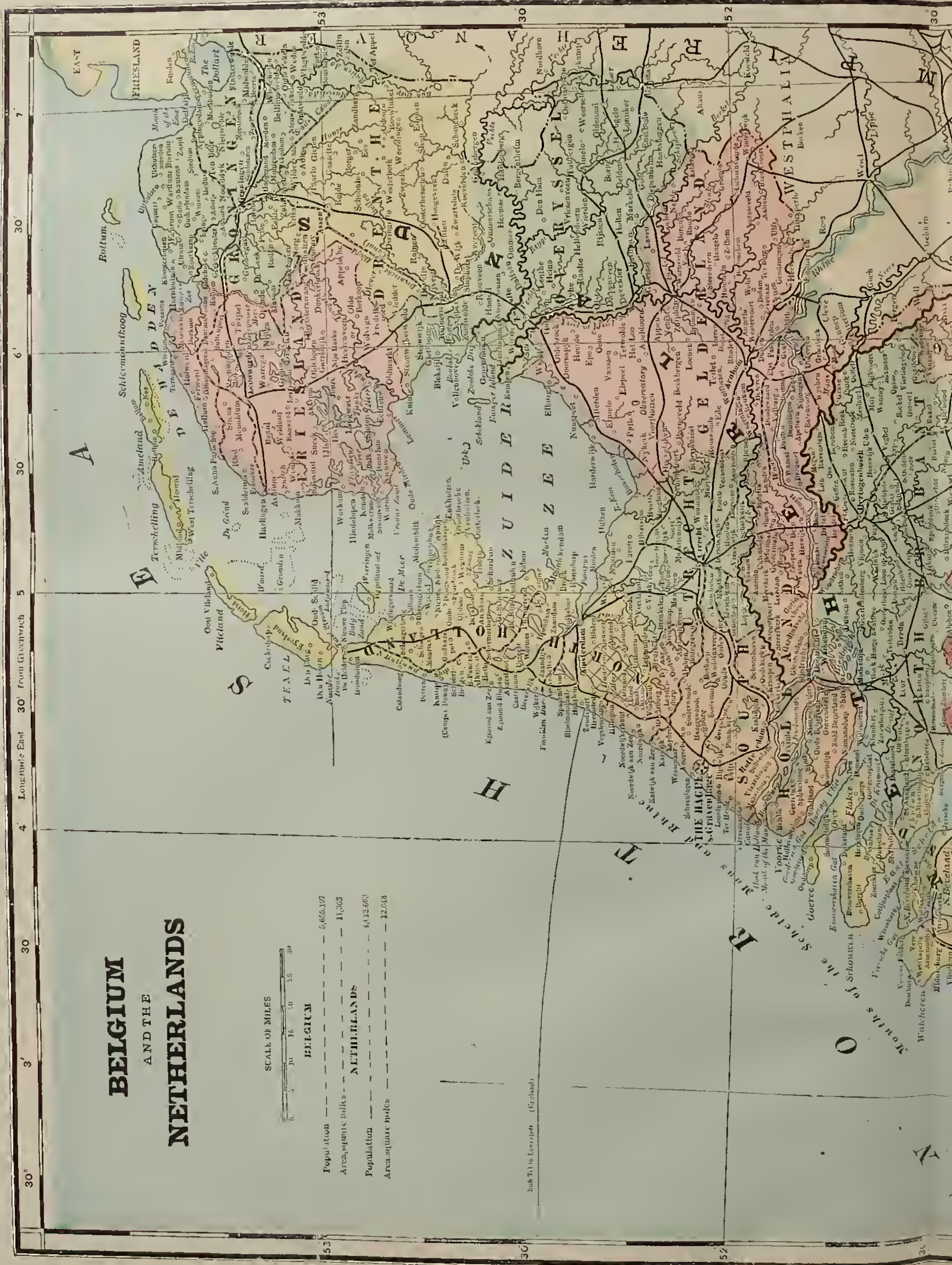
Styria = Steiermark.

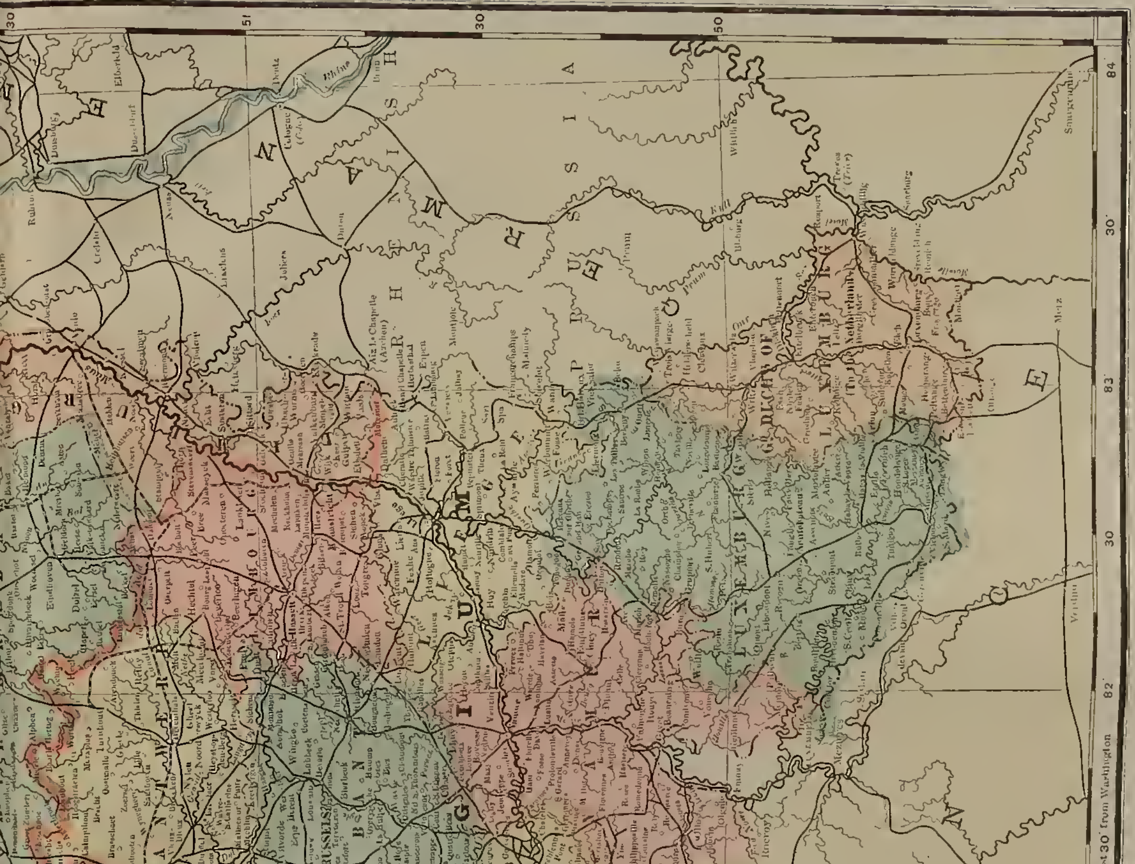

99
101
103
105
50
48
46
44
22
24
26
GALICIA
HUNGARY
TRANSYLVANIA
BUKOWINA
RUSSIA
ROUMANIA
CARPATHIAN MTS.
TRANSYLVANIAN ALPS
MONTENEGRO
Danube
Bukharest
Rustchuk
Sandomierz
Przemysl
Lemberg
Tarnopol
Czernowitz
Debreczen
Klausenburg
Hermannstadt
Kronstadt
Temesvar
Szegedin
Belgrad
Novi Bazar
Plojesti
Craiova
Turnowitz
Ratibor
Kremenetz
Lebtehy
Tirgul Formos
CONTINUATION OF DALMATIA &c.
(On same scale)
Longitude east of Washington
Longitude east of Greenwich
ADRIATIC SEA
Lissa I.
Curzola I.
Lagosta I.
Meleda
Pelagosa
Tremiti
Ragusa
Bocche di Cattaro
HERZEGOVINA
MONTENEGRO
Cettigne
Antivari

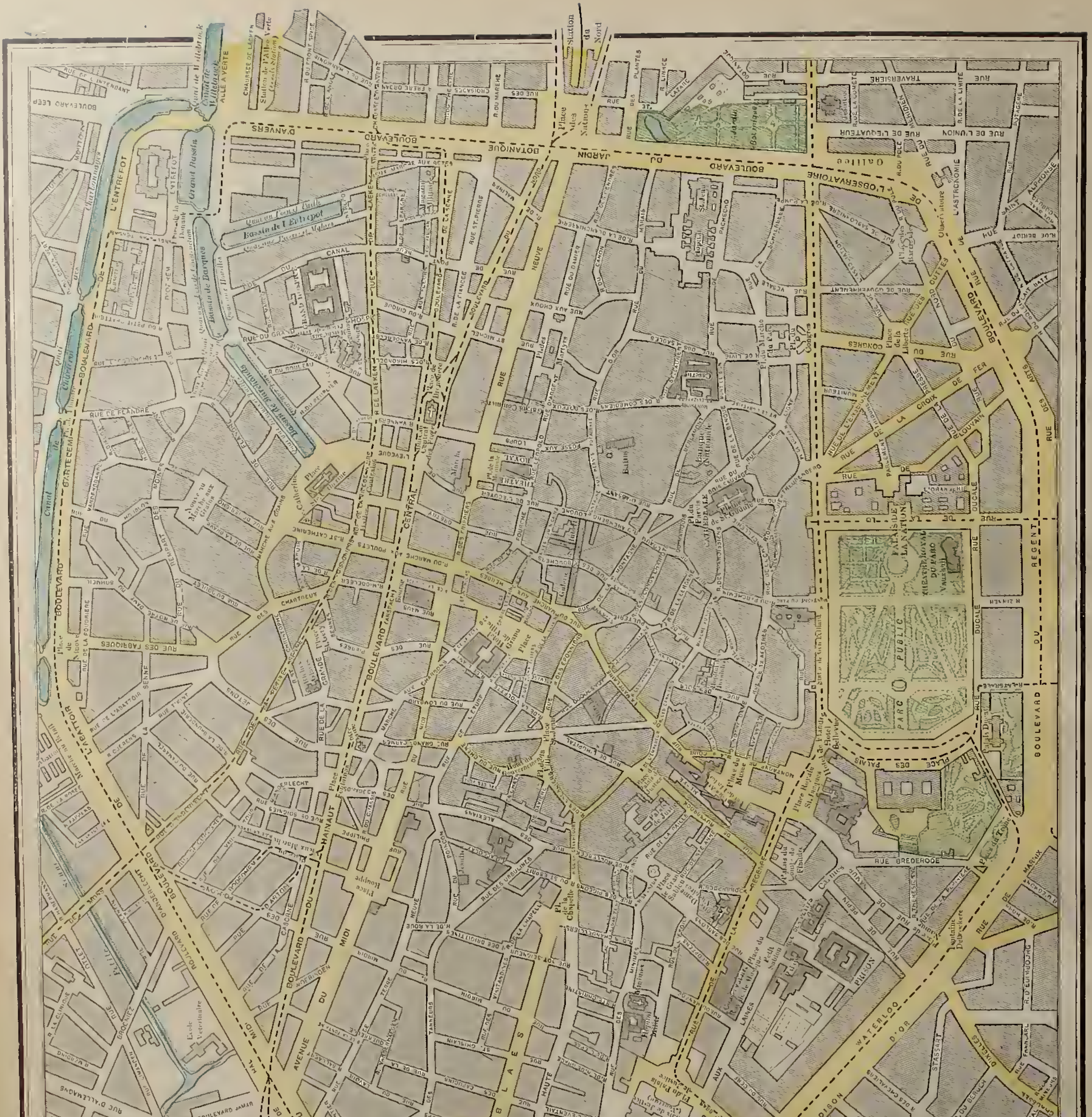

SWEDEN
AND
NORWAY
SCALE OF MILES
Longitude east 16 from Greenwich
Longitude east from Washington
ARCTIC OCEAN
NORTH ATLANTIC OCEAN
SCANDINAVIAN SEA
NORTH SEA
SKAGER RACK
CATTEGAT
BALTIC SEA
GULF OF BOTHNIA
GULF OF FINLAND
GULF OF RIGA
LOFODEN ISLANDS
WEST FIORD
NORWAY
SWEDEN
LAPLAND
FINLAND
DENMARK
ESTHONIA
LIVONIA
COURLAND
KOVNO
NORRLAND
SVEALAND
GOTHLAND
HAMAR
CHRISTIANSAND
CHRISTIANIA
STOCKHOLM
GOTHLAND
OELAND
ALAND
North Cape
Tromsoe
Hammerfest
Trondhjem
Bergen
Stavanger
Gottenburg
Malmo
Carlskrona
Upsala
Gefle
Hernosand
Tornea
Lulea
Umea
Wener Lake
Wetter L.
Helsingfors
Abo
Uleaborg
Revel
Riga
Pskov
Peipus Lake
Lake Enara
Dago
Osel
Windau
Libau
Memel
Mitau
Dunaburg
4
8
12
16
20
24
28
32
70
66
62
58
85
89
93
97
101
104

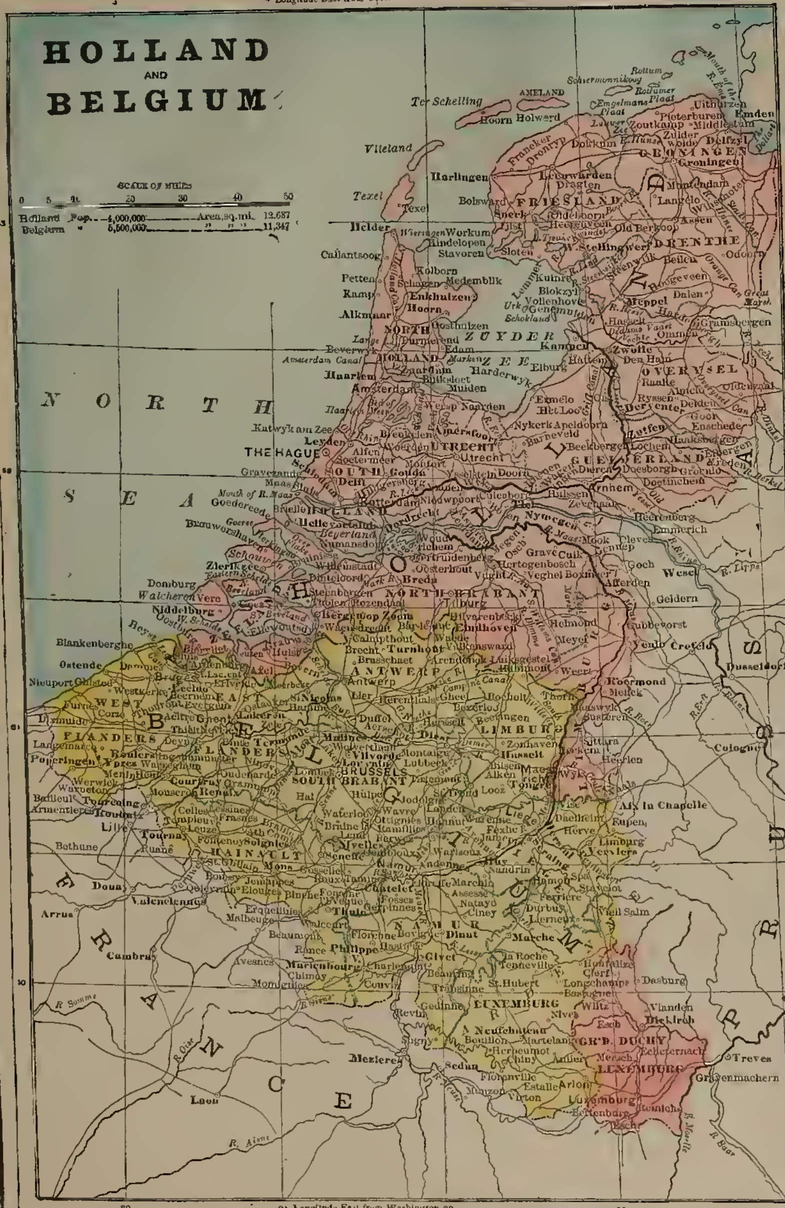

GULF OF BOTHNIA
BALTIC SEA
GOTHLAND
OELAND
SWEDEN
STOCKHOLM

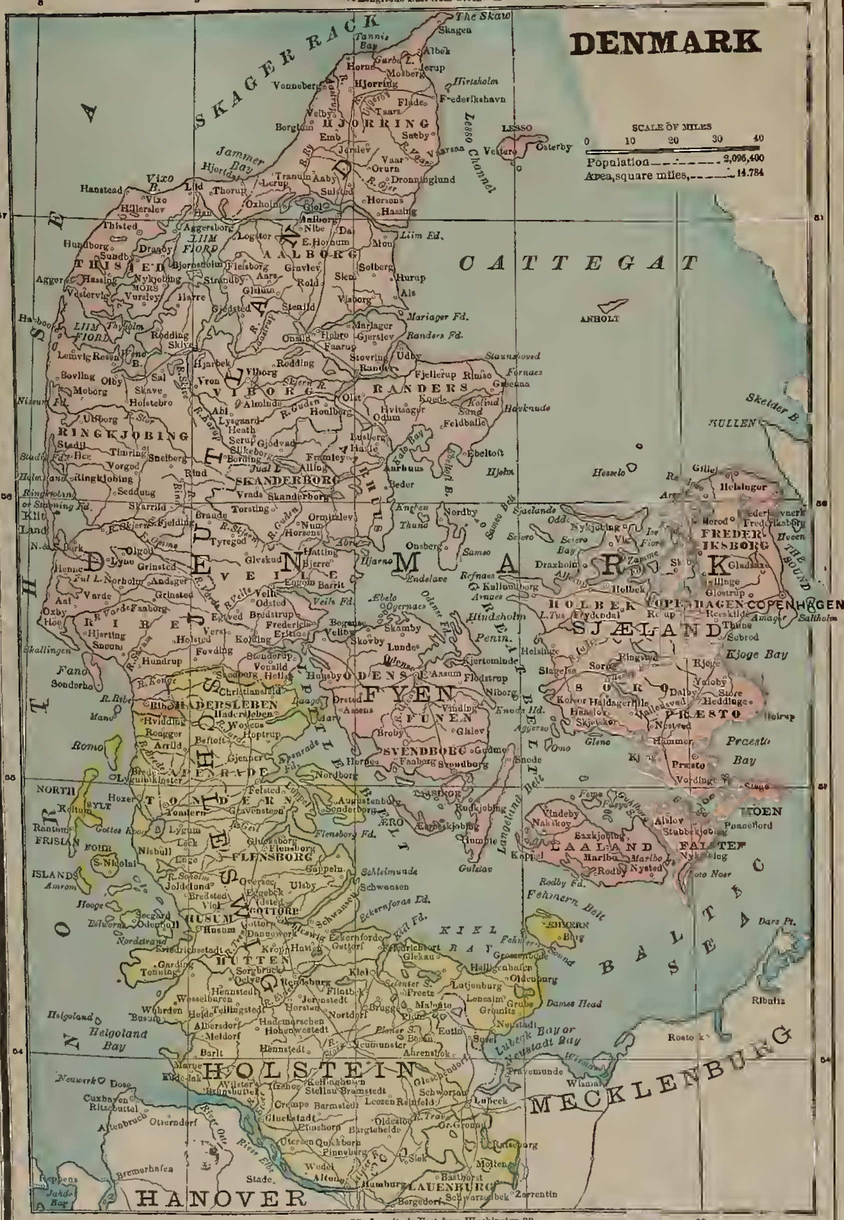

STOCKHOLM
SWEDEN
DJURGARDEN PARK
SKEPPSHOLMEN
Kastellholmen
Beckholmen
THE BALTIC
MALAR LAKE
Riddarholmen
Kungstrad Garden
Ladugardslands viken
Ad. Fred. Torg

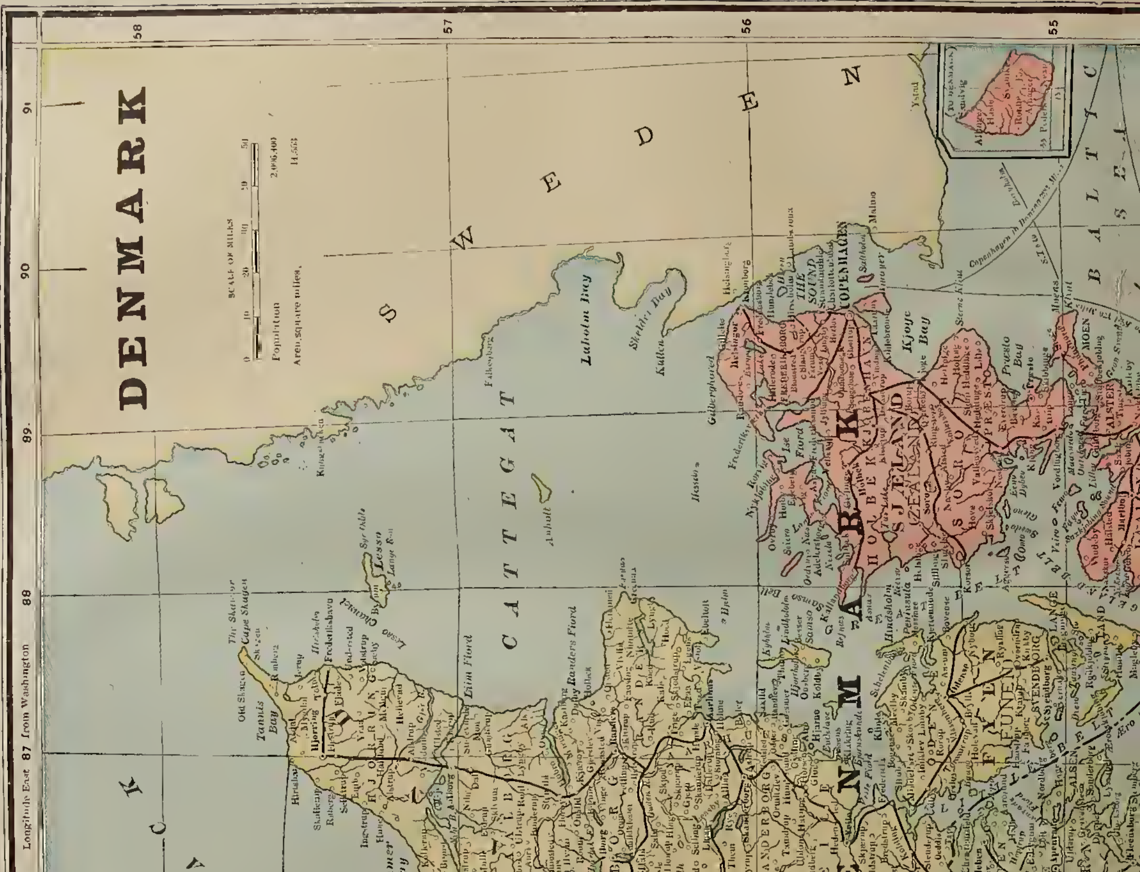

BELGIUM
AND THE
NETHERLANDS
SCALE OF MILES
0 5 10 15 20 25 30
BELGIUM
Population — — — — — — — — 6,686,107
Area, square miles — — — — — — 11,373
NETHERLANDS
Population — — — — — — — — 4,412,669
Area, square miles — — — — — — 12,648
Longitude East 30' from Greenwich
NORTH SEA
ZUIDER ZEE
WADDEN ZEE
FRIESLAND
GRONINGEN
DRENTHE
OVERYSSEL
GELDERLAND
UTRECHT
NORTH HOLLAND
SOUTH HOLLAND
NORTH BRABANT
WESTPHALIA
THE HAGUE
Amsterdam
Texel
Vlieland
Terschelling
Ameland
Schiermonnikoog
Rottum
Mouths of the Scheldt
Sub Tel to Lowestoft (England)
53
52

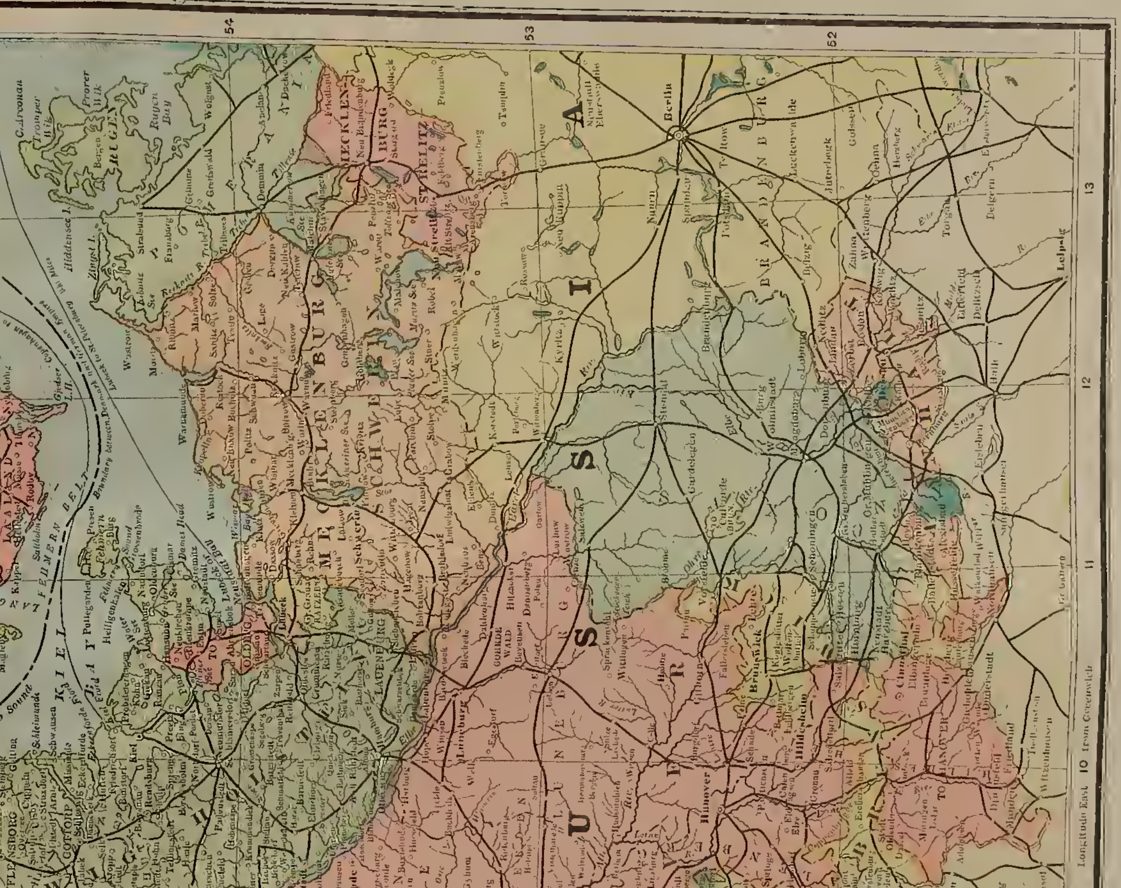

BELGIUM
BRUSSELS
BRABANT
EAST FLANDERS
WEST FLANDERS
ANTWERP
LIMBURG
LIEGE
NAMUR
LUXEMBURG
GD. DUCHY OF LUXEMBURG
RHENISH PRUSSIA
FRANCE
Longitude East 30' from Washington
80
81
82
83
84
30
50
51

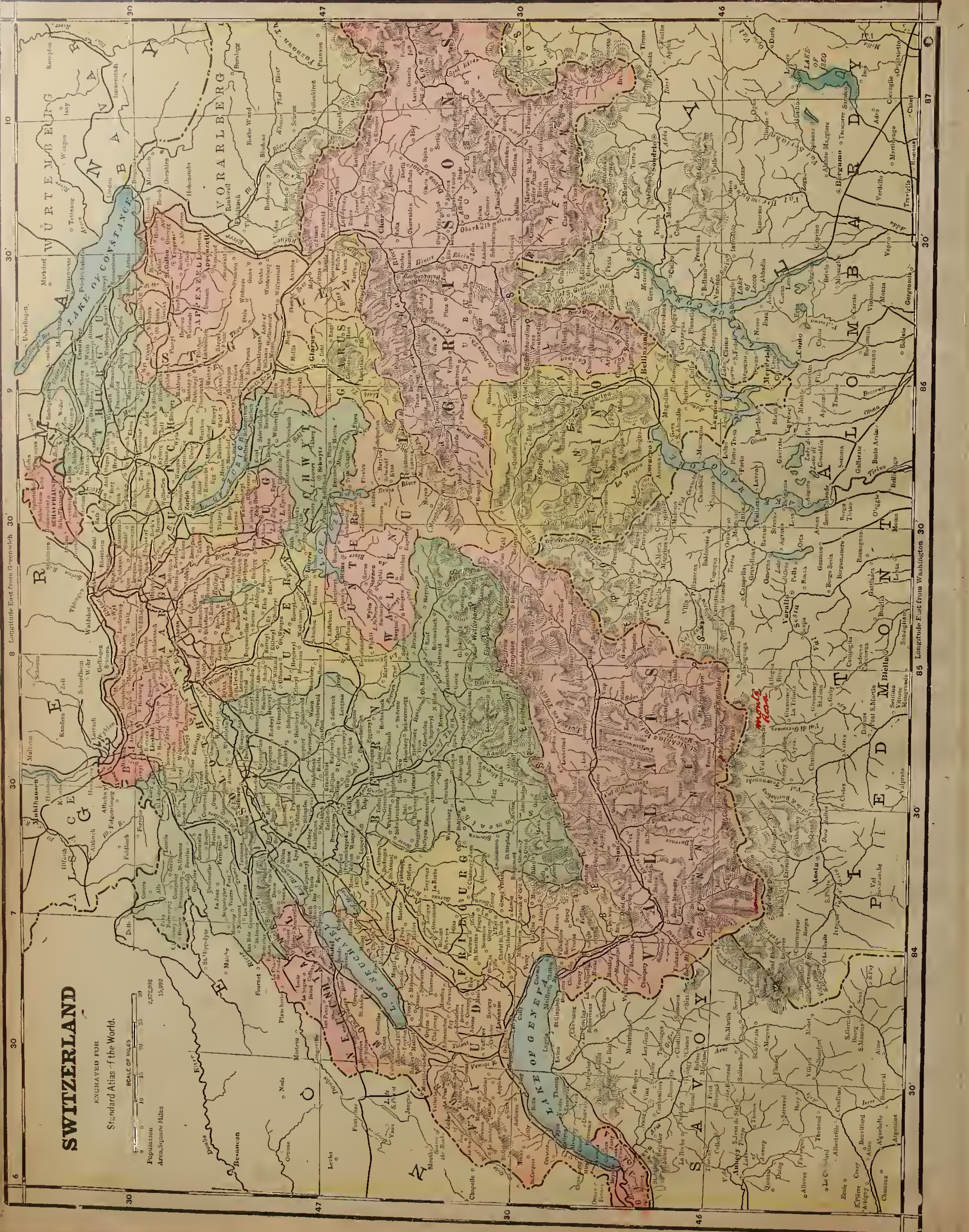

BRUSSELS
(BELGIUM)
Station du Nord
Station du Midi
Boulevard d'Anvers
Boulevard Botanique
Boulevard du Jardin Botanique
Boulevard de l'Observatoire
Boulevard du Régent
Boulevard de Waterloo
Boulevard du Midi
Boulevard de l'Entrepôt
Boulevard Central
Boulevard du Hainaut
Avenue du Midi
Avenue Louise
Avenue de la Toison d'Or
Rue Neuve
Rue Royale
Rue Ducale
Rue de la Loi
Rue Haute
Rue Blaes
Rue de Louvain
Rue de la Croix de Fer
Rue du Congrès
Rue Bréderode
Rue du Bosquet
Rue Berckmans
Rue des Fabriques
Rue de Flandre
Place de Brouckère
Place Ste. Catherine
Place Royale
Place du Jeu de Balle
Place du Grand Sablon
Place du Petit Sablon
Parc Public
Palais de la Nation
Palais du Roi
Palais de Justice
Jardin Botanique
Bassin de l'Entrepôt
Grand Bassin
Canal
Cathédrale de Ste. Gudule
Hôpital St. Pierre
Porte de Hal
Observatoire
Ecole Vétérinaire


HOLLAND AND BELGIUM
SCALE OF MILES
0 5 10 20 30 40 50
Holland Pop. 4,000,000 Area, sq. mi. 12,687
Belgium " 5,500,000 " " " 11,347
4 Longitude East from Greenwich 5
81 Longitude East from Washington 82
NORTH SEA
ZUYDER ZEE
FRANCE
PRUSSIA
HOLLAND
BELGIUM
GRONINGEN
FRIESLAND
DRENTHE
OVERYSEL
GUELDERLAND
UTRECHT
NORTH HOLLAND
SOUTH HOLLAND
ZEELAND
NORTH BRABANT
LIMBURG
ANTWERP
WEST FLANDERS
EAST FLANDERS
SOUTH BRABANT
HAINAULT
NAMUR
LUXEMBURG
GR'D. DUCHY LUXEMBURG
THE HAGUE
Amsterdam
BRUSSELS
Ostende
Liège
Cologne
Dusseldorf


DENMARK
SCALE OF MILES
0 10 20 30 40
Population 2,096,400
Area, square miles, 14,784
10 Longitude East from Greenwich 11
87 Longitude East from Washington 88
SKAGER RACK
CATTEGAT
BALTIC SEA
NORTH SEA
Lesso Channel
THE SOUND
KIEL BAY
The Skaw
DENMARK
JUTLAND
HJORRING
AALBORG
THISTED
VIBORG
RANDERS
RINGKJOBING
SKANDERBORG
AARHUS
VEILE
RIBE
FYEN
ODENSE
SVENDBORG
SJÆLAND
HOLBEK
FREDERIKSBORG
COPENHAGEN
SORO
PRÆSTO
LAALAND
FALSTER
MOEN
SCHLESWIG
HADERSLEBEN
APENRADE
TONDERN
FLENSBORG
HUSUM
GOTTORP
HUTTEN
HOLSTEIN
LAUENBURG
MECKLENBURG
HANOVER
ANHOLT
LESSO
Helgoland Bay


DENMARK
SCALE OF MILES
0 10 20 30 40 50
Population 2,096,400
Area, square miles 14,553
Longitude East 87 from Washington
S W E D E N
S K A G E R R A C K
C A T T E G A T
N O R T H S E A
B A L T I C
D E N M A R K
JUTLAND
SJÆLLAND (ZEALAND)
FYEN (FUNEN)
COPENHAGEN
THE SOUND
Laholm Bay
Skelder Bay
Kjoge Bay
Lim Fiord
Randers Fiord
Jammer Bay
Tannis Bay
Cape Skagen
The Skaw
Læsø
Anholt
Samsø
ALSEN
MOEN
FALSTER
LANGELAND
Ringkjobing Fiord
Stadil Fiord
Nissum Fiord
Fanø
Malmo
Ystad
ICELAND
ARCTIC OCEAN
ATLANTIC OCEAN
Reykjavik
FAROE IS.
BORNHOLM
56
57
58
83
84
85
86
88
89
90
91


Berlin
Hanover
Bremen
Hamburg
Lübeck
Leipzig
Brunswick
Magdeburg
Lüneburg
Oldenburg
Rügen
Kiel
Heligoland
MECKLENBURG SCHWERIN
MECKLENBURG STRELITZ
BRANDENBURG
HANOVER
OLDENBURG
WESTPHALIA
LIPPE
PRUSSIA
Longitude East 10 from Greenwich
54
53
52
7
8
9
10
11
12
13


Longitude East from Greenwich
Longitude East from Washington
WÜRTEMBERG
BAVARIA
VORARLBERG
LAKE OF CONSTANCE
THURGAU
ST. GALLEN
APPENZELL
SCHAFFHAUSEN
ZURICH
AARGAU
BASEL
SOLOTHURN
LUZERN
ZUG
SCHWYZ
GLARUS
GRISONS
TICINO
URI
UNTERWALDEN
BERN
FRIBOURG
NEUCHATEL
VAUD
VALAIS
GENEVA
LAKE OF GENEVA
L. OF NEUCHATEL
LAKE OF LUCERNE
LAKE OF ZURICH
BADEN
ALSACE
FRANCE
SAVOY
PIEDMONT
LOMBARDY
LAKE OF ISEO
Lake Maggiore
Lake of Como
Lugano
Bellinzona
Monte Rosa

SWITZERLAND

ENGRAVED FOR

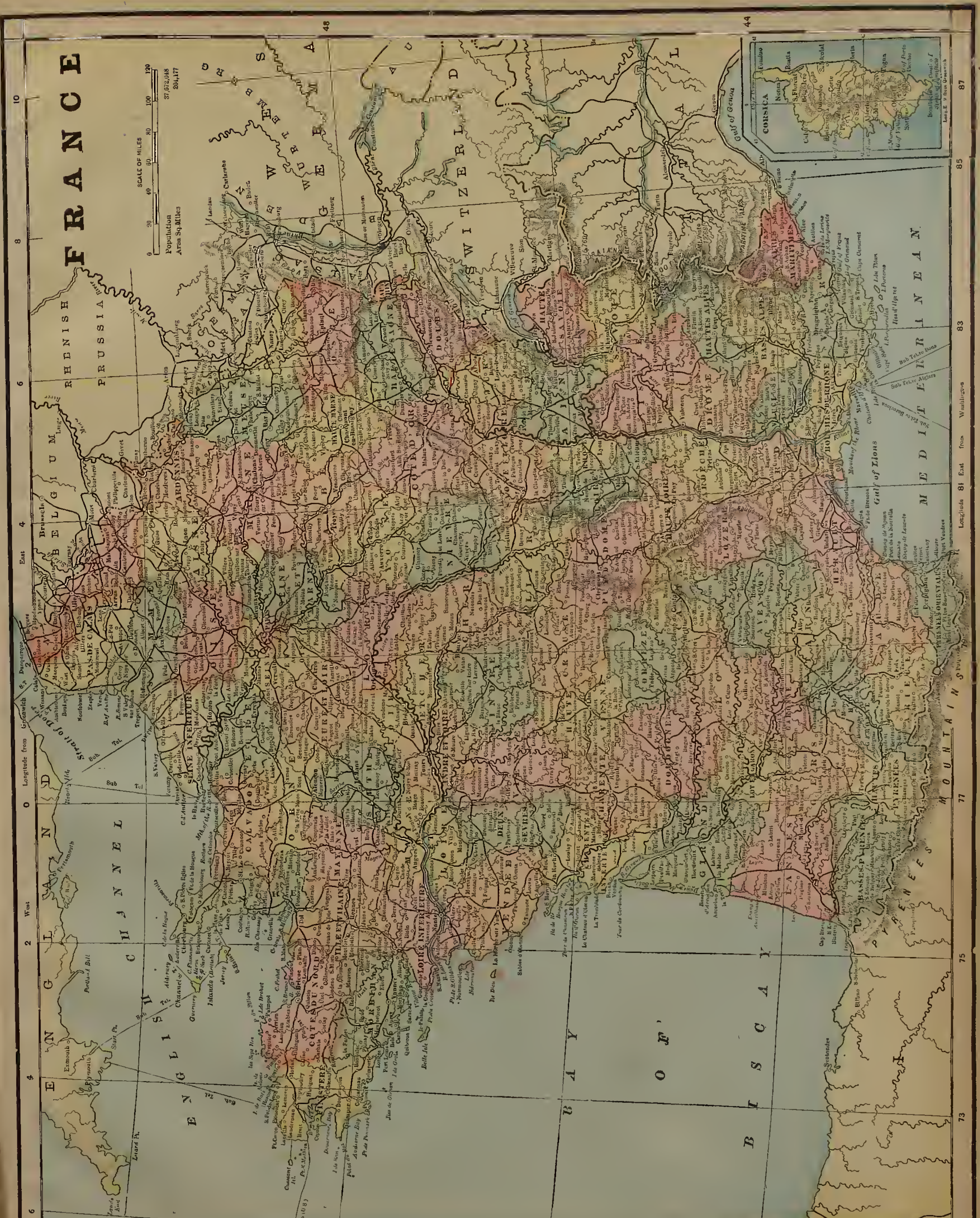
Standard Atlas of the World.

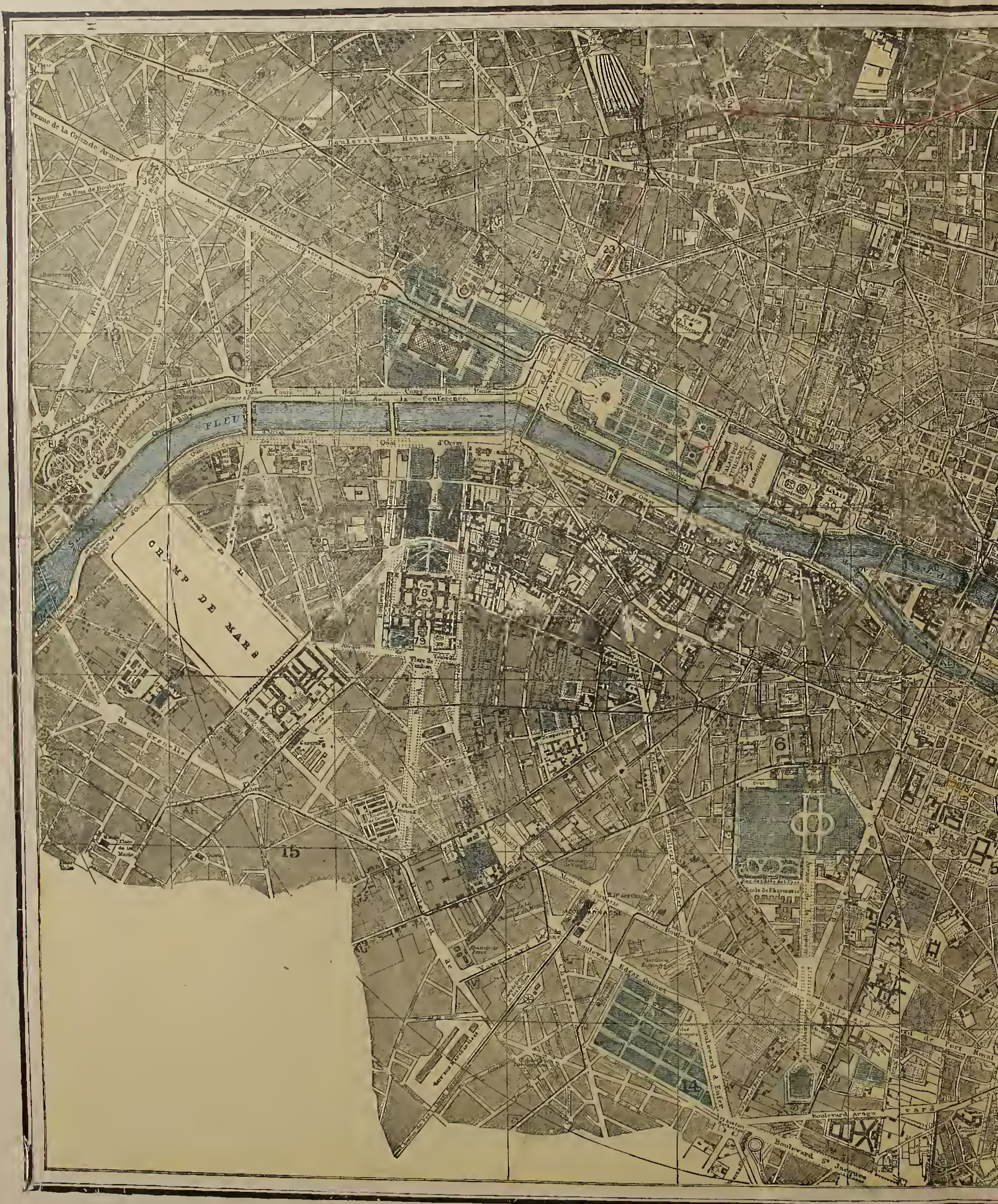
SCALE OF MILES

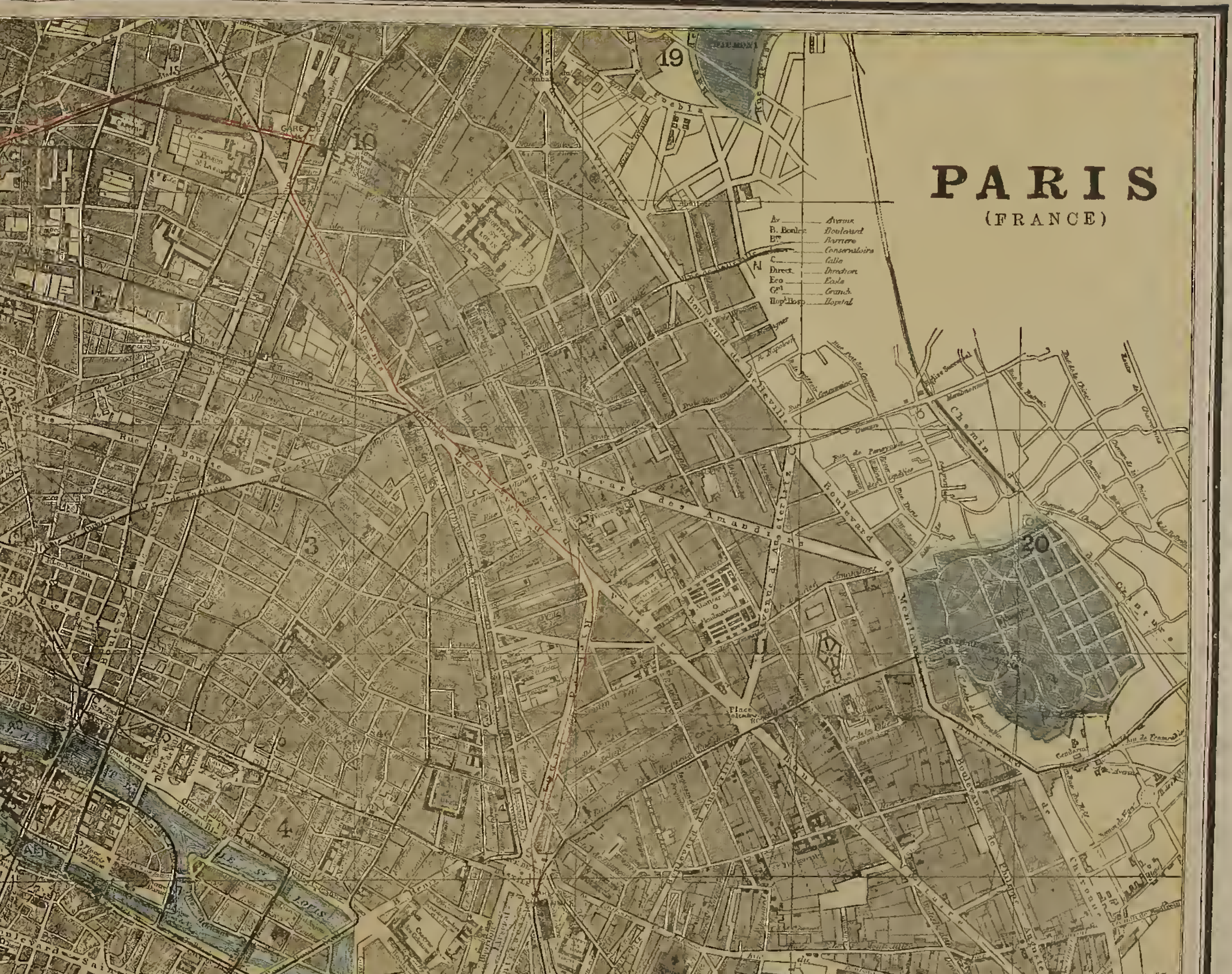
0 5 10 15 20 25 30

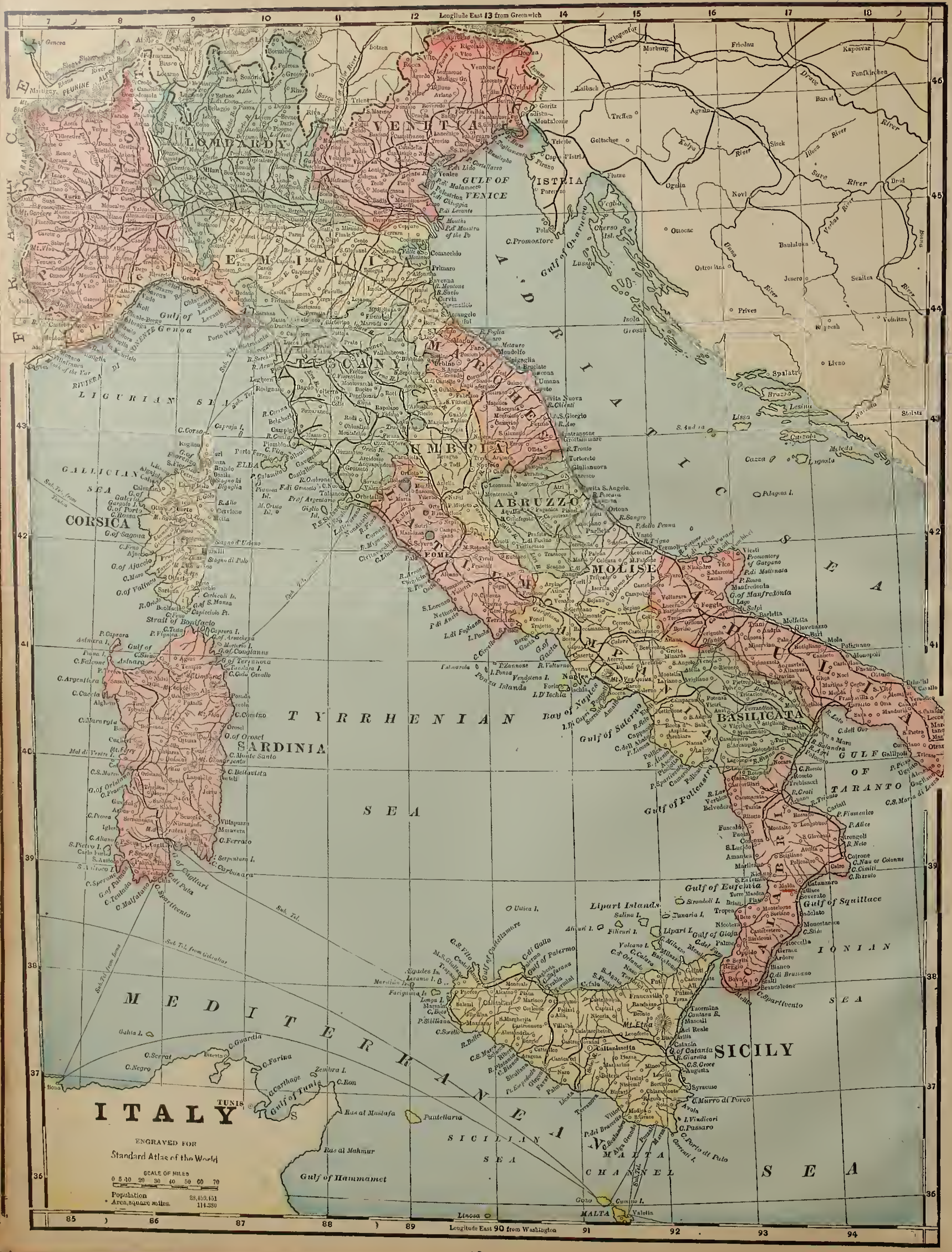
Population 2,872,908

Area, Square Miles 15,992


FRANCE
SCALE OF MILES
0 20 40 60 80 100 120
Population 37,672,048
Area Sq. Miles 204,177
ENGLAND
ENGLISH CHANNEL
BELGIUM
RHENISH PRUSSIA
WURTEMBERG
SWITZERLAND
ITALY
CORSICA
Gulf of Genoa
Gulf of Lions
MEDITERRANEAN
PYRENEES MOUNTAINS
BAY OF BISCAY
Channel Islands (British)
Longitude from Greenwich
Longitude East from Washington


Avenue de la Grande Armée
Avenue du Bois de Boulogne
Boulevard Haussmann
Avenue des Champs Elysées
Cours la Reine
Quai de la Conférence
Quai d'Orsay
FLEUVE
CHAMP DE MARS
CARROUSEL
Boulevard du Montparnasse
Boulevard Edgar Quinet
Boulevard d'Enfer
Boulevard Arago
Boulevard St. Jacques
Boulevard de Port Royal
Montparnasse
Ecole de Pharmacie
36
24
20
23
8
79
6
15
14
5


PARIS
(FRANCE)
Av. — Avenue
B. Boulev. — Boulevard
B.re — Barriere
— Conservatoire
C. — Calle
Direct. — Direction
Eco — Ecole
G.d — Grand
Hop.l Hosp — Hopital
N
10
19
20
11
3
4
5
12
13
Boulevard des Amandiers
Boulevard de Belleville
Boulevard de Menilmontant
Place du Trone
Cours de Vincennes
Jardin Botanique
Boulevard de Bercy
Boulevard de Reuilly
Boulevard de Port Royal
Seine Fleuve
Chemin de Ceinture



ITALY

ENGRAVED FOR

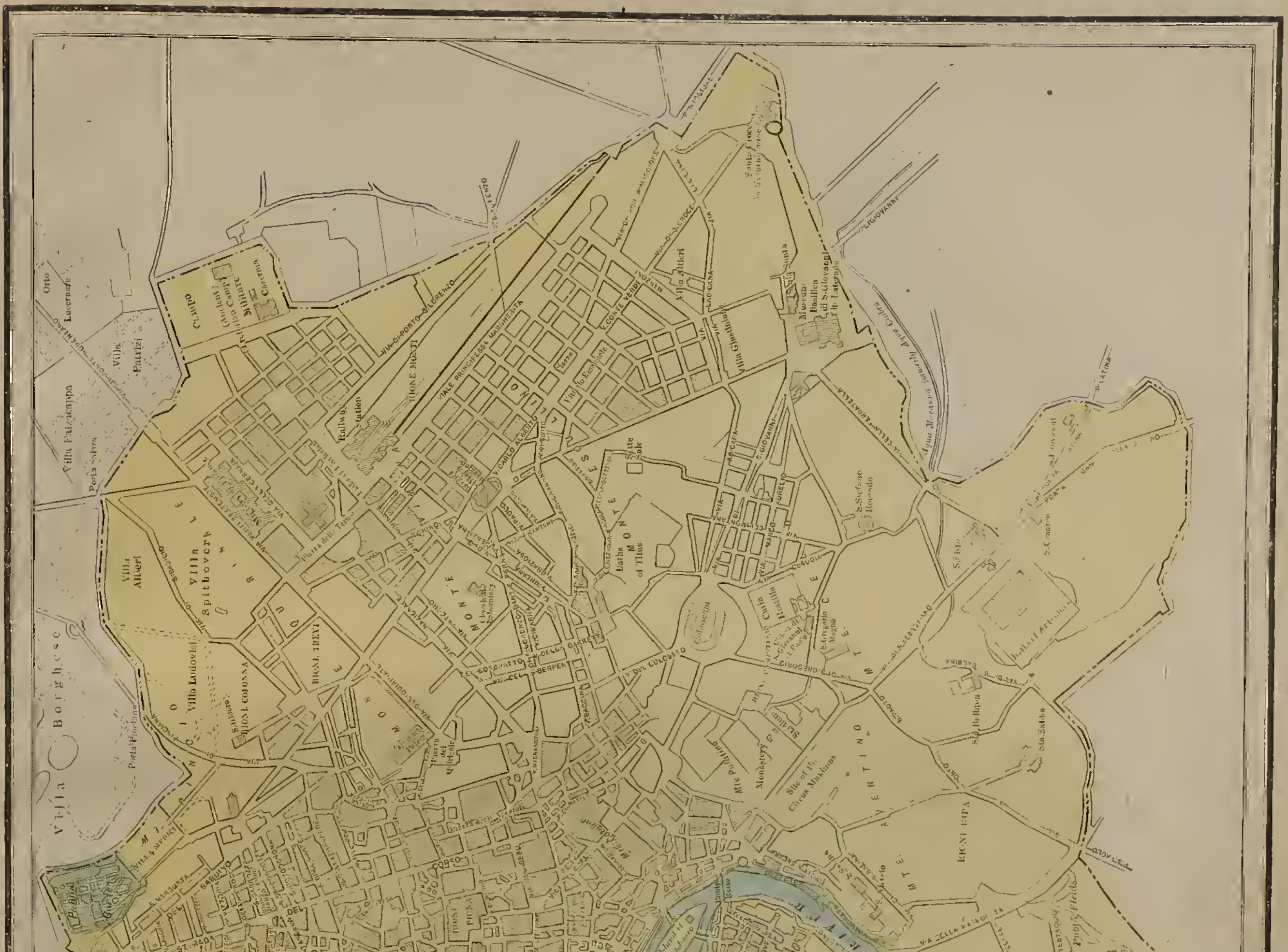
Standard Atlas of the World

SCALE OF MILES

Population 28,459,451

Area, square miles 114,380

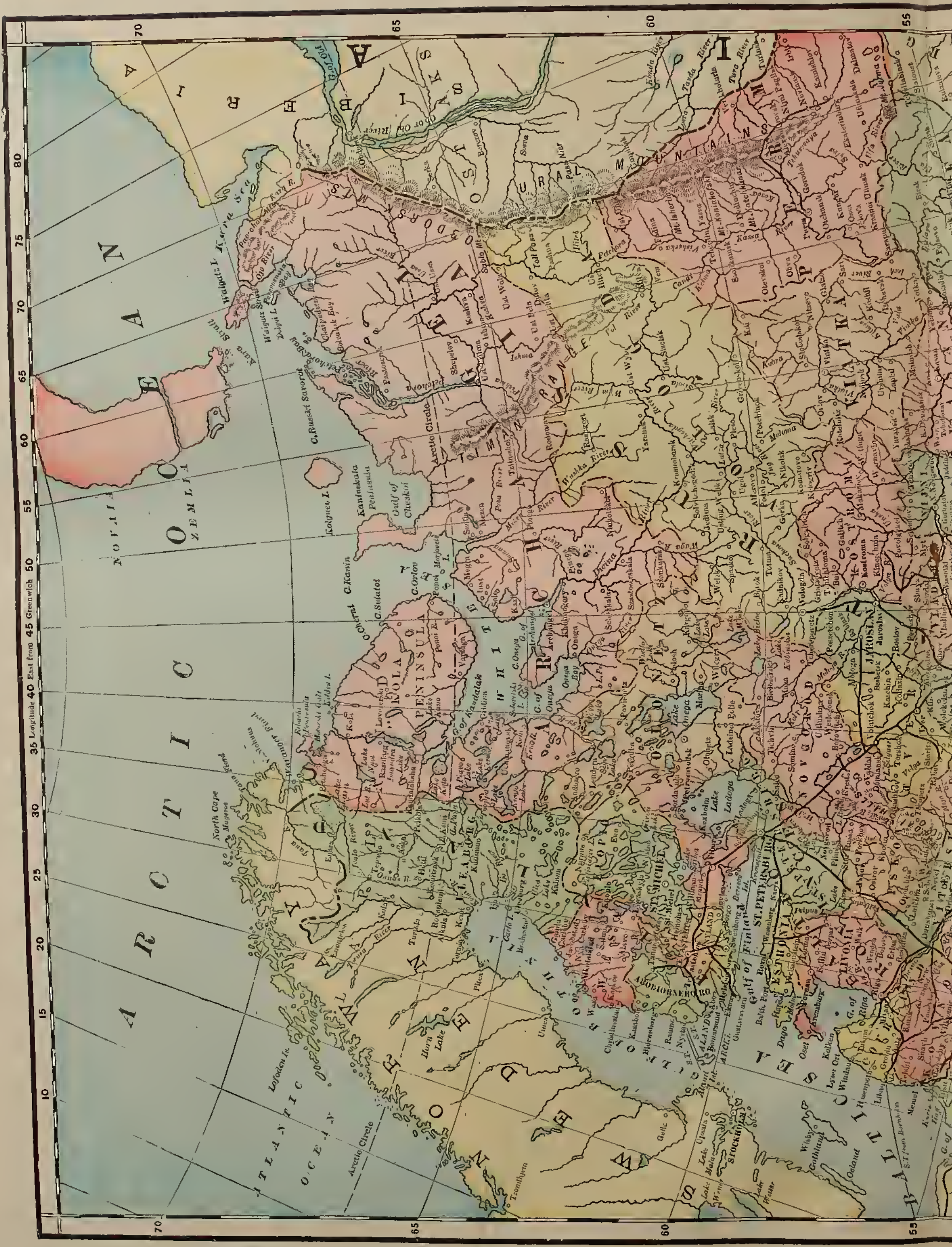
Longitude East 13 from Greenwich
Longitude East 90 from Washington
LOMBARDY
VENETIA
EMILIA
TUSCANY
MARCHES
UMBRIA
LATIUM
ABRUZZO
MOLISE
CAMPANIA
APULIA
BASILICATA
CALABRIA
SICILY
SARDINIA
CORSICA
ISTRIA
ROME
TUNIS
MALTA
ADRIATIC SEA
GULF OF VENICE
LIGURIAN SEA
GALLICIAN SEA
TYRRHENIAN SEA
MEDITERRANEAN SEA
SICILIAN SEA
MALTA CHANNEL
IONIAN SEA
GULF OF TARANTO
Gulf of Genoa
Gulf of Squillace
Gulf of Eufemia
Gulf of Policastro
Gulf of Salerno
Bay of Naples
Gulf of Manfredonia
Gulf of Hammamet
Gulf of Tunis
Strait of Bonifacio
Lipari Islands
Ponza Islands
Mt. Etna
Milan
Turin
Genoa
Venice
Bologna
Florence
Naples
Palermo
Messina
Cagliari
Bari
Taranto
Trieste

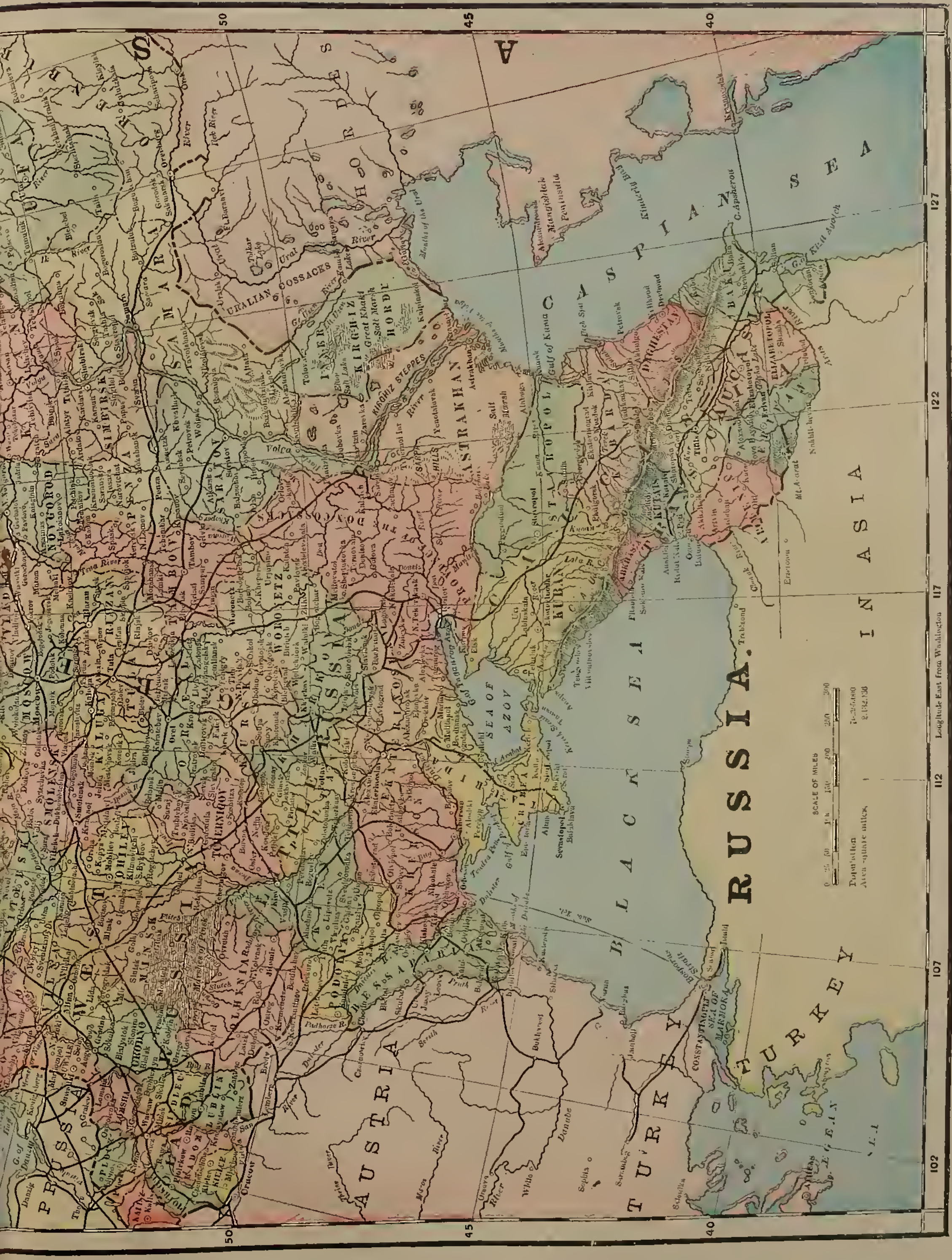


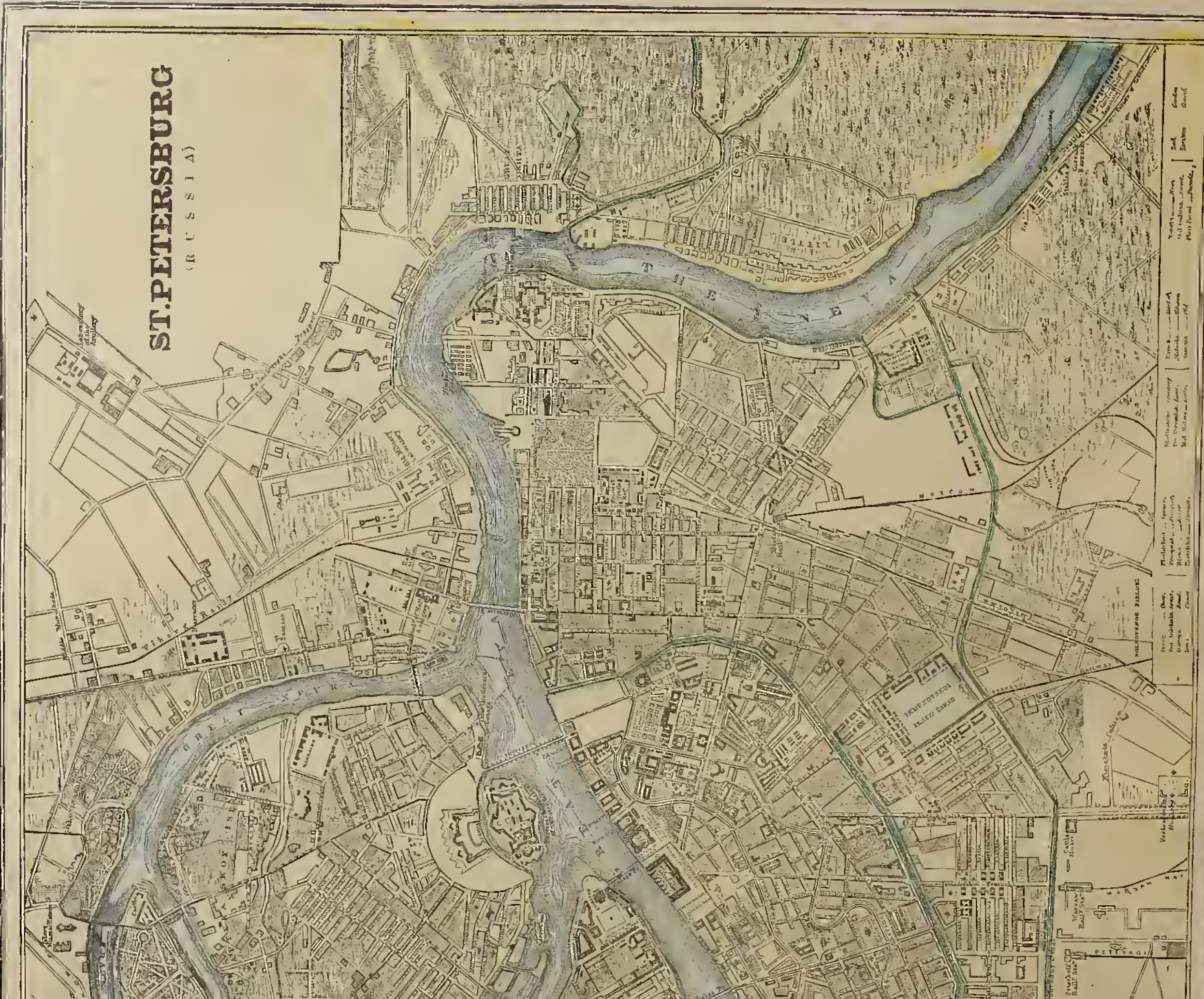
ROME

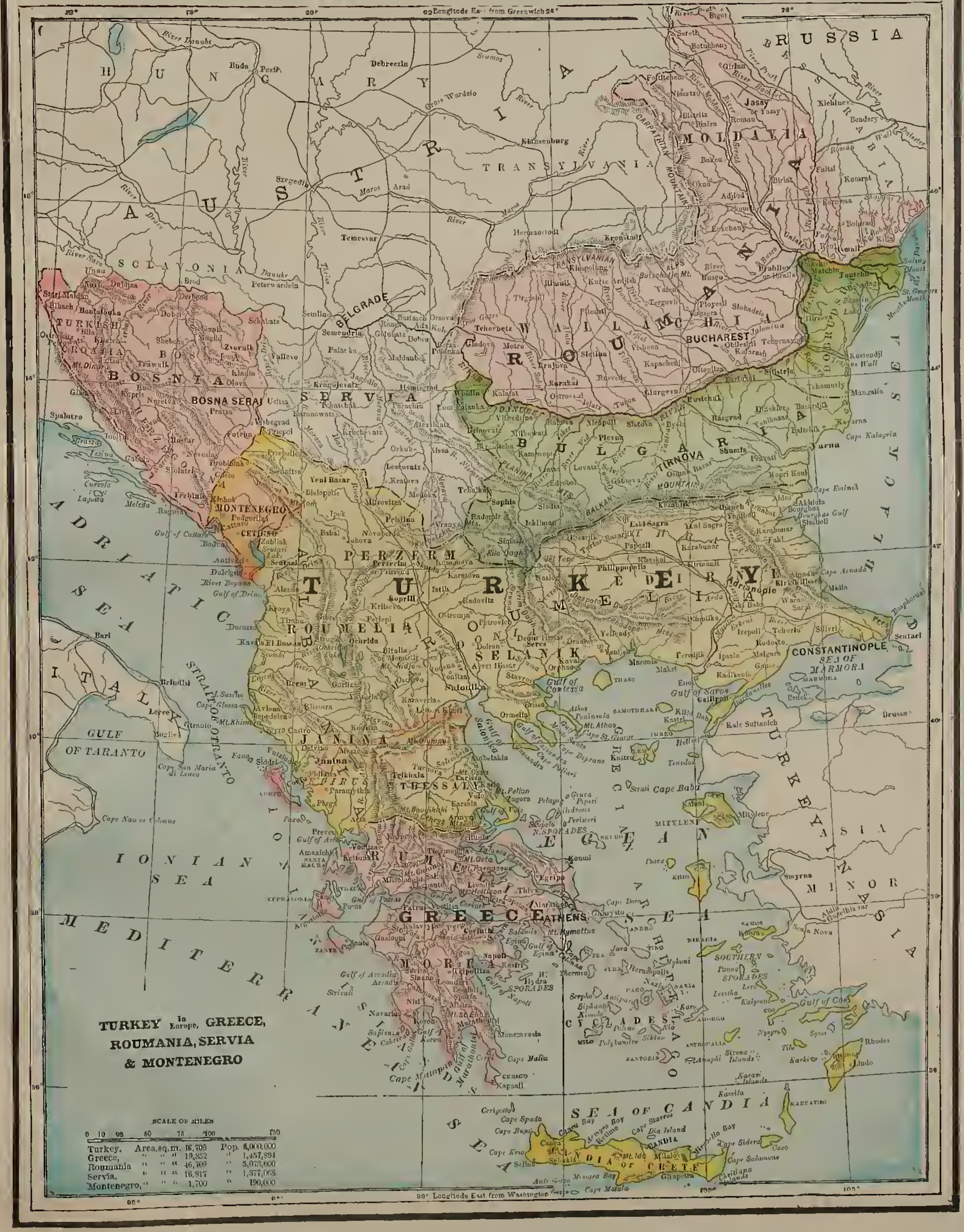
(ITALY)

Villa Borghese
Villa Albani
Villa Patrizi
Porta Salara
Porta Pinciana
Villa Ludovisi
Villa Spithover
Villa Albieri
Campo Militare
Railway Station
Baths of Titus
Coloseum
Villa Altieri
Villa Glustiniani
Basilica di S. Giovanni in Laterano
S. Stefano Rotondo
Villa Mattei
Site of the Circus Maximus
Palatine
S. Saba
S. Balbina
Baths of Caracalla
Aventino
M. Testaccio
Ponte Sisto
Pte Rotto
Villa Farnesina
Villa Corsini
Villa Lante
Villa Sciarra
Villa Barberini
Castello St. Angelo
Piazza of St. Peter
St. Peters
Vatican
Papal Garden
Villa Altoviti
Villa Spada
Porta Cavalleggieri
Modern Walls
River Tiber
Tiber
Piazza del Popolo
Monti
Trevi
Colonna
Campo Marzio
Ripa
Trastevere
Borgo


ARCTIC OCEAN
NOVAIA ZEMLIA
Kara Sea
Kara Strait
Waigatz I.
Kolguev I.
Gulf of Cheskai
C. Kanin
KOLA PENINSULA
WHITE SEA
G. of Onega
ARCHANGEL
OLONETZ
VOLOGDA
URAL MOUNTAINS
Ob River
Arctic Circle
North Cape
Lofoden Is.
ATLANTIC OCEAN
NORWAY
SWEDEN
GULF OF BOTHNIA
FINLAND
Lake Ladoga
Lake Onega
ST. PETERSBURG
Gulf of Finland
ESTHONIA
LIVONIA
BALTIC SEA
STOCKHOLM
Gottland
Oeland
Dago
Oesel
Trondhjem
NOVGOROD
JAROSLAV
KOSTROMA
VIATKA
PERM
Longitude East from Greenwich
70
65
60
55
80
75
50
45
40
35
30
25
20
15
10

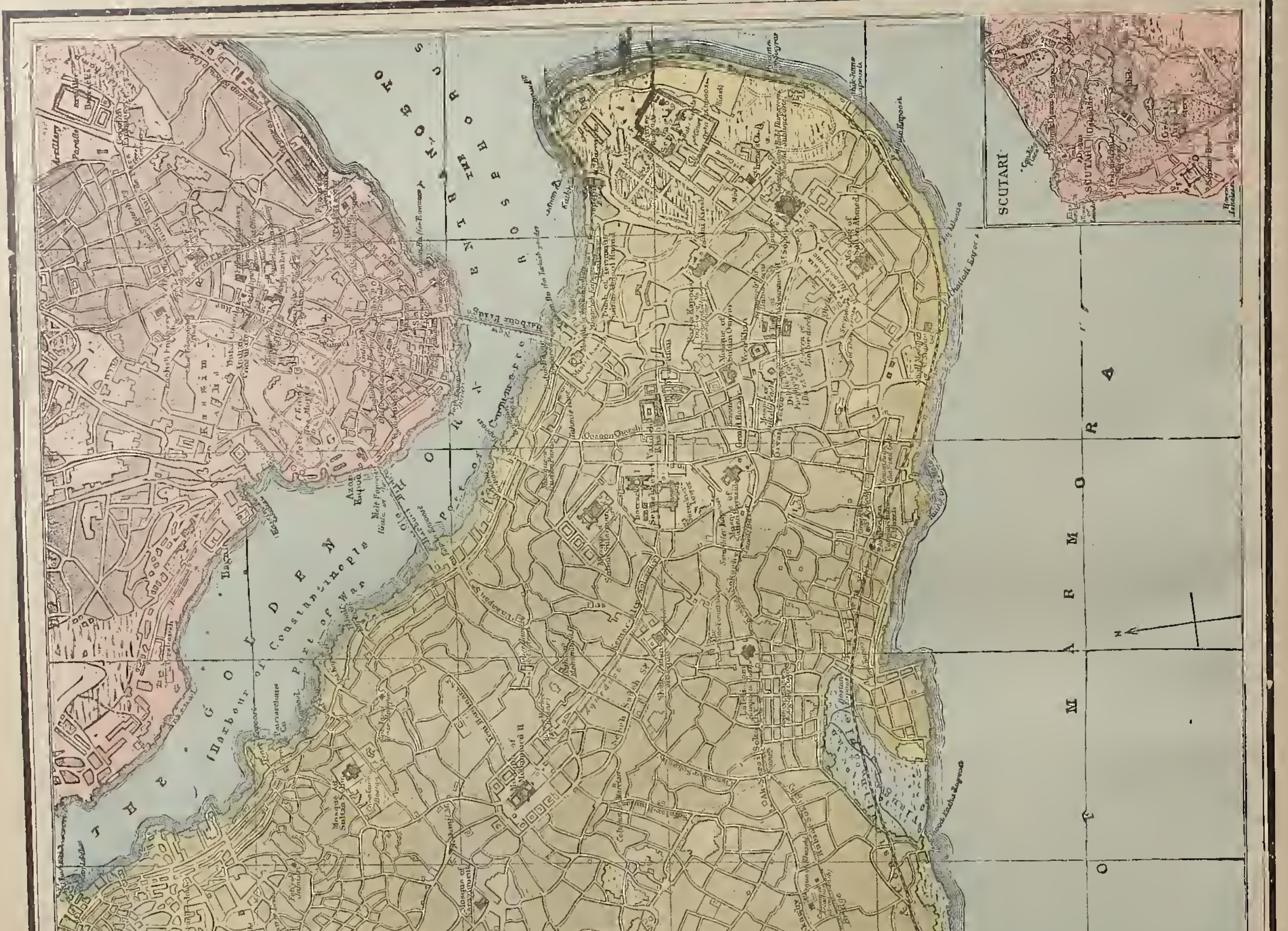

RUSSIA
IN ASIA
CASPIAN SEA
BLACK SEA
SEA OF AZOV
CRIMEA
ASTRAKHAN
STAVROPOL
KIRGHIZ STEPPES
URALIAN COSSACKS
DAGHESTAN
KUBAN
TURKEY
TURKEY IN ASIA
AUSTRIA
CONSTANTINOPLE
SEA OF MARMORA
SCALE OF MILES
Longitude East from Washington
50
45
40
102
107
112
117
122
127

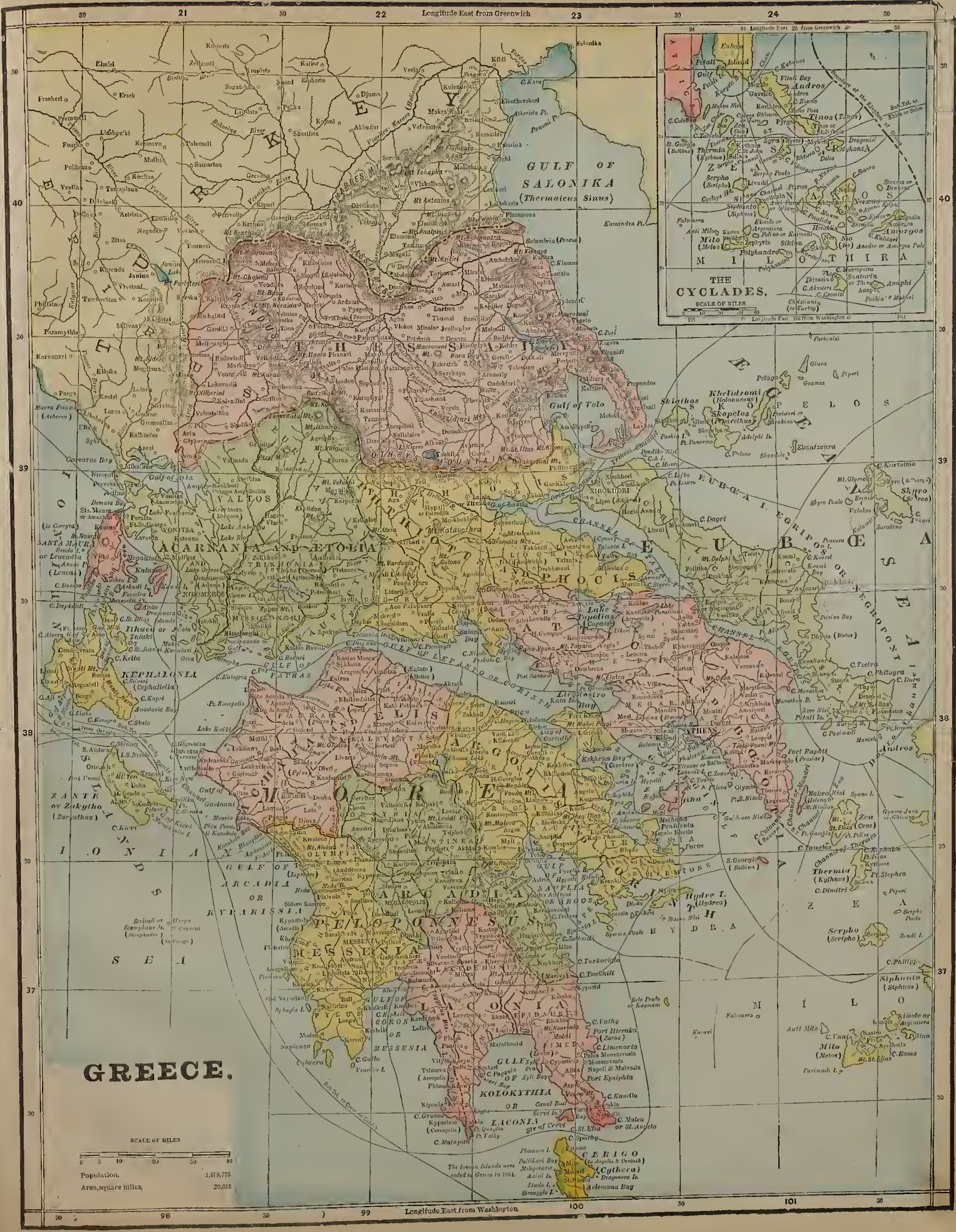

ST. PETERSBURG
(RUSSIA)
THE NEVA
GREAT NEVA
LITTLE NEVA
GULF OF FINLAND
VASSILI OSTROV
PETROVSKI
MOSCOW
WARSAW
PETERHOF
Catherinhovka


Longitude East from Greenwich
AUSTRIA HUNGARY
RUSSIA
BESSARABIA
MOLDAVIA
WALLACHIA
ROUMANIA
TRANSYLVANIA
SCLAVONIA
BOSNIA
SERVIA
BELGRADE
BUCHAREST
MONTENEGRO
BULGARIA
TURKEY
ROUMELIA
CONSTANTINOPLE
SEA OF MARMORA
BLACK SEA
ADRIATIC SEA
ITALY
GULF OF TARANTO
IONIAN SEA
MEDITERRANEAN SEA
GREECE
ATHENS
AEGEAN SEA
SEA OF CANDIA
CANDIA OR CRETE
ASIA MINOR
SCALE OF MILES
0 10 25 50 75 100 150
Longitude East from Washington

TURKEY In Europe, GREECE, ROUMANIA, SERVIA & MONTENEGRO

Turkey,	Area, sq. m.	16,709	Pop.	6,000,000
Greece,	" " "	19,352	"	1,457,894
Roumania	" " "	46,709	"	5,073,000
Servia,	" " "	16,817	"	1,377,068
Montenegro,	" " "	1,700	"	190,000


MAP OF
CONSTANTINOPLE
Scale of One English Mile
SCUTARI
SEA OF MARMORA
BOSPHORUS
THE GOLDEN HORN
Harbour of Constantinople
Port of War
Armenian & Ulcek Cemetery
Old Greek Hospital
New Greek Hospital
Armenian Hospital
Mosque of Sultan Selim
Mosque of Mahmoud II
Great Bazaar
Garden of Yahmali

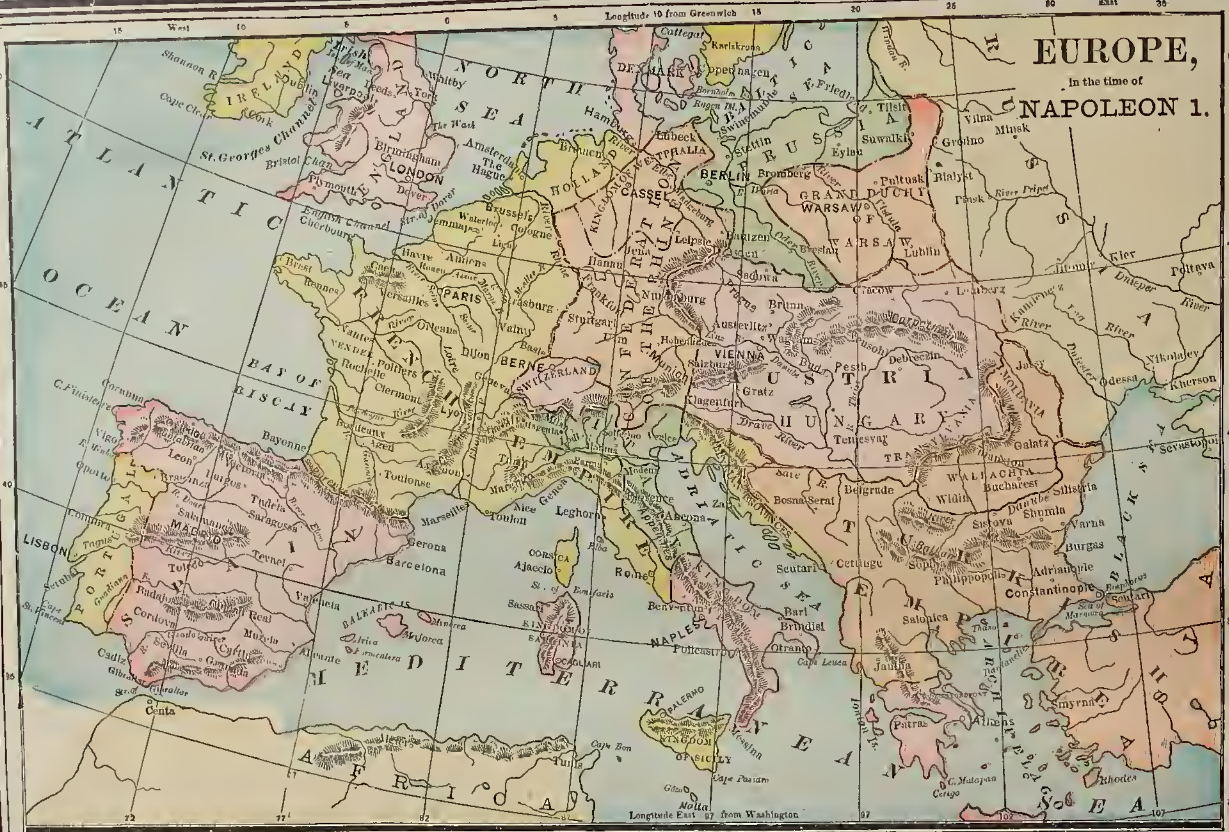

Longitude East from Greenwich
Longitude East from Washington
THE CYCLADES.
SCALE OF MILES
GULF OF SALONIKA (Thermaicus Sinus)
Salonika
THESSALIA
EPIRUS
TURKEY
ACARNANIA AND ÆTOLIA
PHTHIOTIS AND PHOCIS
ATTICA AND BŒOTIA
EUBŒA I. EGRIPOS OR NEGROPONT
ARGOLIS AND CORINTH
ACHAIA AND ELIS
ARCADIA
MESSENIA
LACONIA
MOREA
PELOPONNESUS
KEPHALONIA
Ithaca or Thiaki
ZANTE or Zakytho (Zacynthus)
SANTA MAURA or Leucadia (Leucas)
IONIAN ISLANDS
IONIAN SEA
ÆGEAN SEA
GULF OF PATRAS
GULF OF LEPANTO OR CORINTH
GULF OF ARCADIA OR KYPARISSIA
GULF OF CORON OR MESSENIA
GULF OF KOLOKYTHIA OR LACONIA
GULF OF NAUPLIA OR ARGOS
ATHENS
Gulf of Volo
CERIGO (Cythera)
Hydra I. (Hydrea)
Andros
Tinos (Tenos)
Syra
Naxos
Paros
Milo (Melos)
Serpho (Seripho)
Thermia (Kythnos)
Zea (Ceos)
Siphanto (Siphnos)
Skyro (Scyros)
Skiathos
Skopelos (Peparethus)
Kheliodromi (Holonnesus)
The Ionian Islands were ceded to Greece in 1864.

GREECE.

SCALE OF MILES

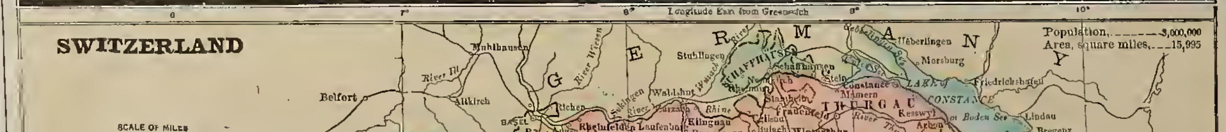
0 5 10 20 30 40

Population,	1,679,775
Area, square miles,	20,018



EUROPE,
in the time of
NAPOLEON 1.

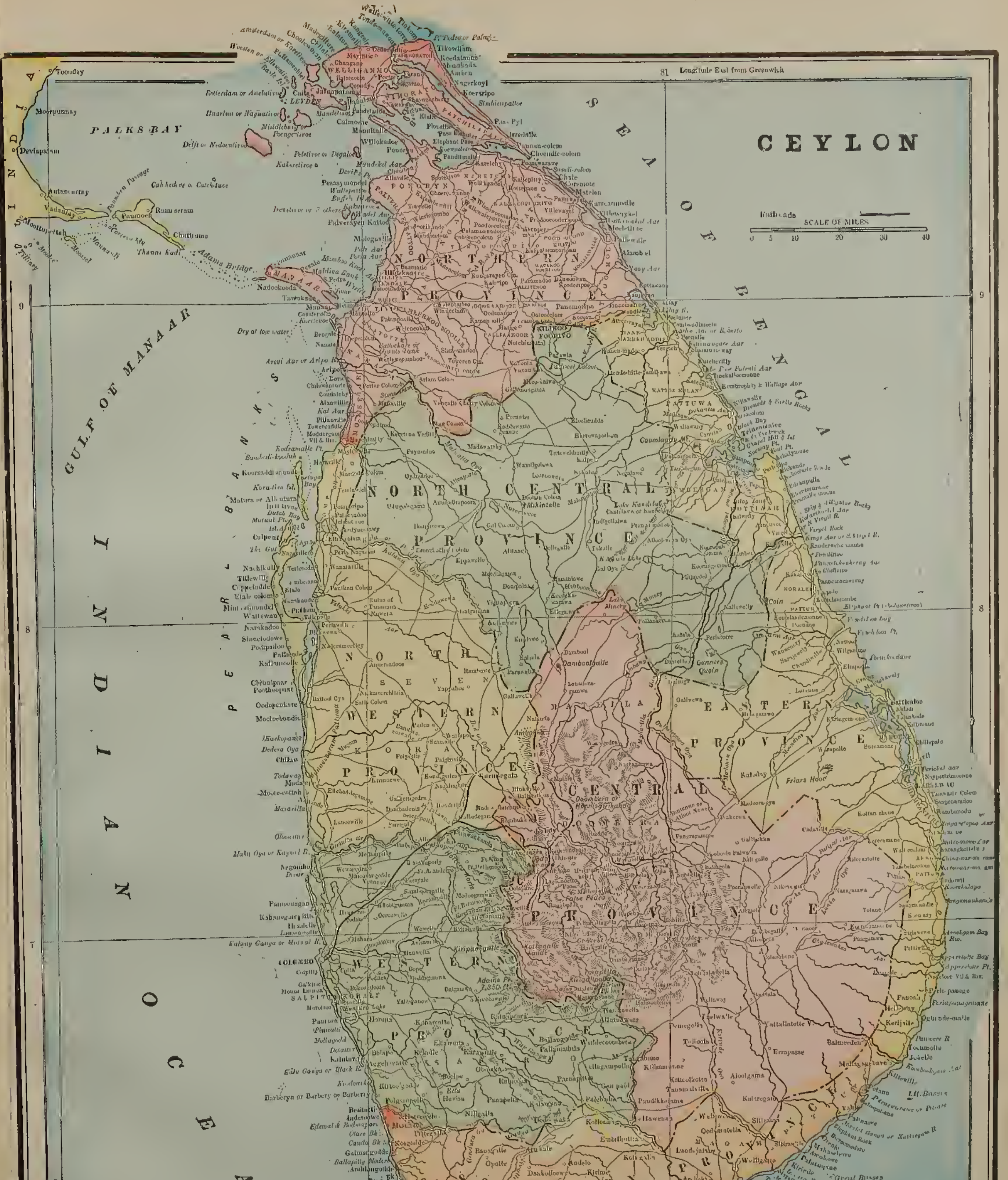
Longitude 10 from Greenwich
Longitude East 97 from Washington
ATLANTIC OCEAN
NORTH SEA
BALTIC SEA
BAY OF BISCAY
MEDITERRANEAN SEA
ADRIATIC SEA
BLACK SEA
AEGEAN SEA
AFRICA
IRELAND
ENGLAND
LONDON
DENMARK
Copenhagen
HOLLAND
KINGDOM OF WESTPHALIA
CASSEL
CONFEDERATION OF THE RHINE
PRUSSIA
BERLIN
GRAND DUCHY OF WARSAW
WARSAW
RUSSIA
FRANCE
EMPIRE
PARIS
BERNE
SWITZERLAND
AUSTRIA
VIENNA
HUNGARY
TRANSYLVANIA
MOLDAVIA
WALLACHIA
Bucharest
TURKEY
Constantinople
SPAIN
MADRID
PORTUGAL
LISBON
ITALY
Rome
NAPLES
KINGDOM OF SICILY
PALERMO
CORSICA
SARDINIA
BALEARIC IS.
Marseilles
Toulon
Barcelona
Gibraltar
Ceuta
Austerlitz
Jena
Leipsic
Tilsit
Eylau
Wagram
Ulm
Waterloo
Amsterdam
Brussels
Hamburg
Lubeck
Munich
Odessa
Kherson
Athens
Smyrna
Rhodes

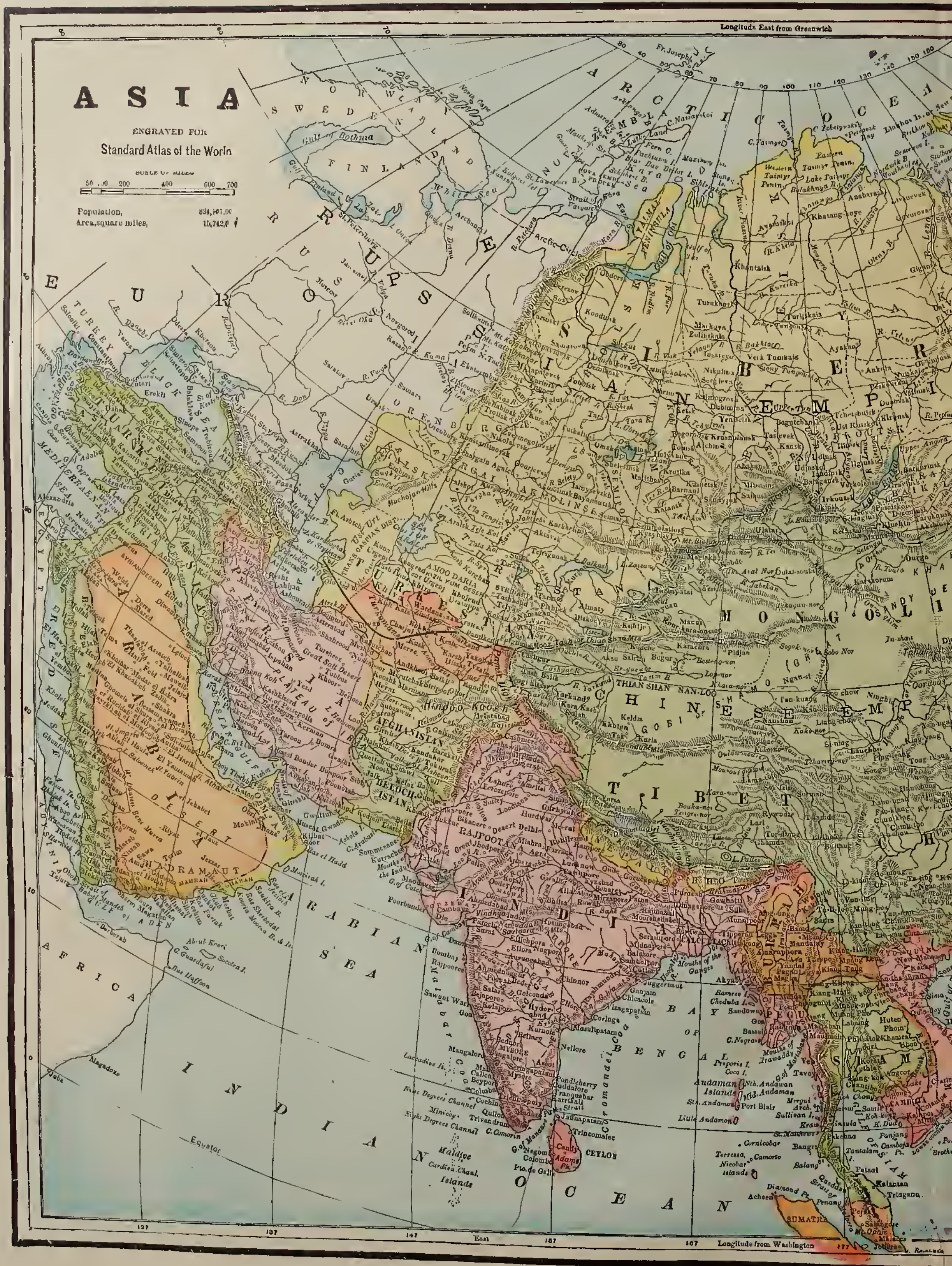


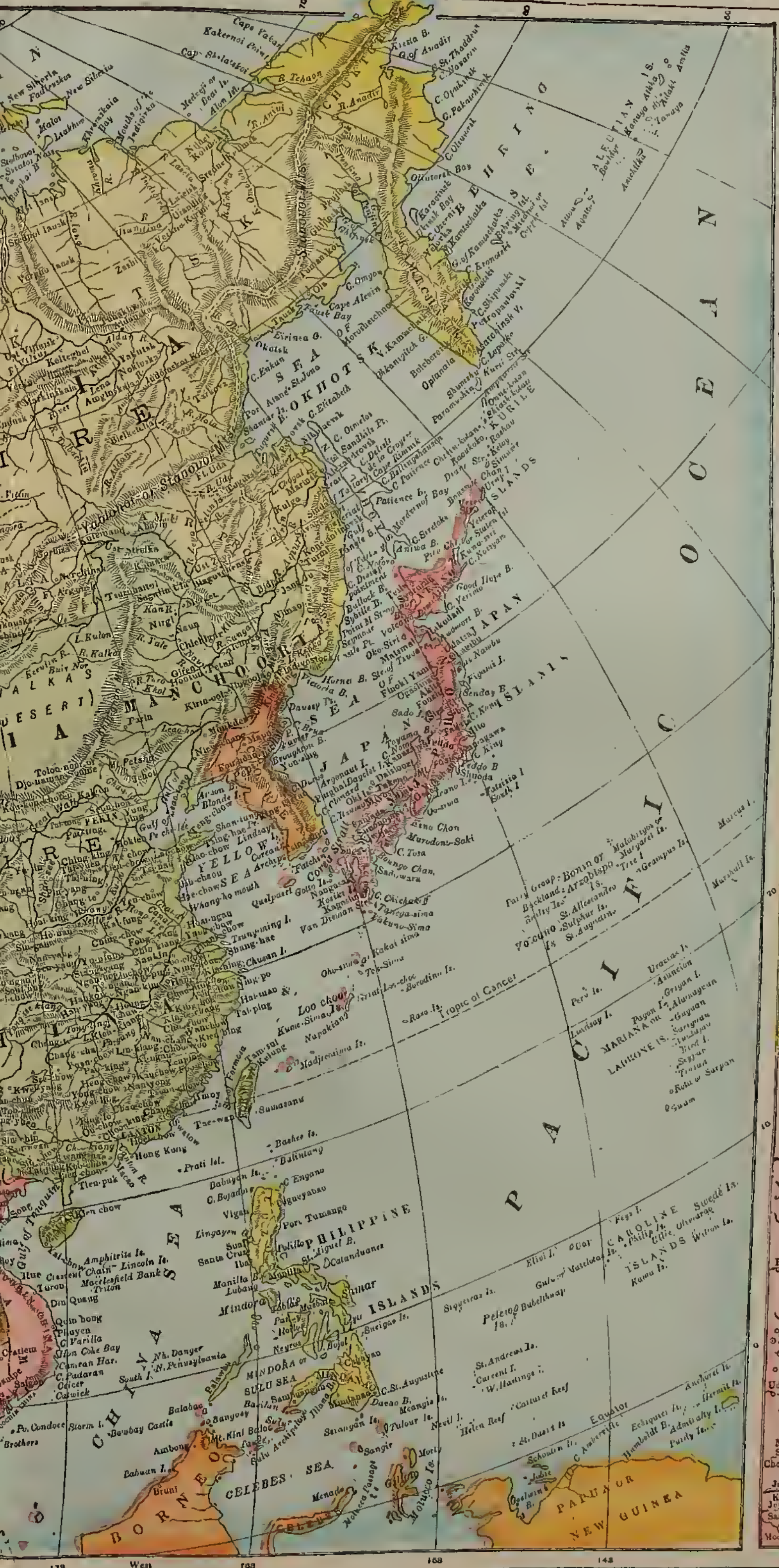
SWITZERLAND

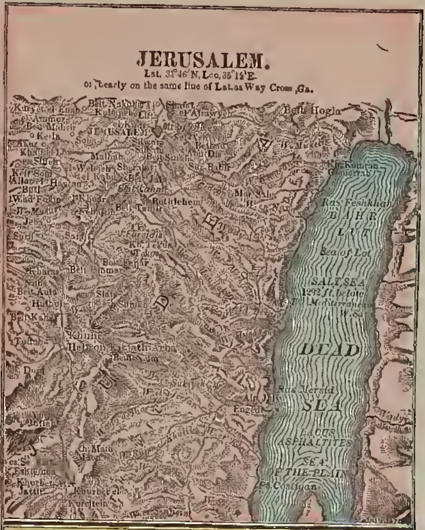
Population, 3,000,000
Area, square miles, 15,995

Longitude East from Greenwich
Longitude East from Washington
SCALE OF MILES
0 5 10 20 30
GERMANY
AUSTRIA
FRANCE
ITALY
SCHAFFHAUSEN
THURGAU
LAKE OF CONSTANCE
ZURICH
AARGAU
BASEL
ST. GALL
APPENZELL
LUCERNE
SCHWYTZ
GLARUS
GRISONS
BERN
FRIBOURG
NEUFCHATEL
VAUD
GENEVA
LAKE of GENEVA or Lake Leman
TICINO
VALAIS
Belfort
Doubs
Champagnole
Lons
Morez
Thonon
S. Rambert
Annecy
Mount Blanc
Monte Rosa
Lake Maggiore
Lake of Como
Lake of Lugano
Lake of Lecco
Como
Lecco
Varese
Tirano
Bregenz
Feldkirch
Friedrichshafen
Lindau


CEYLON
Longitude East from Greenwich
Longitude East from Washington
SCALE OF MILES
0 5 10 20 30 40
INDIA
PALKS BAY
GULF OF MANAAR
PEARL BANKS
INDIAN OCEAN
SEA OF BENGAL
NORTHERN PROVINCE
NORTH CENTRAL PROVINCE
NORTH WESTERN PROVINCE
EASTERN PROVINCE
CENTRAL PROVINCE
WESTERN PROVINCE
SOUTHERN PROVINCE
Adams Bridge
COLOMBO
Trincomalee
Batticaloa
Kandy
Adams Pk.
9
8
7
6
81
156
158


ASIA
ENGRAVED FOR
Standard Atlas of the World
SCALE OF MILES
50 100 200 400 600 700
Population, 834,107,00
Area, square miles, 15,742,0
Longitude East from Greenwich
Longitude from Washington
East
ARCTIC OCEAN
EUROPE
RUSSIA
SWEDEN
NORWAY
FINLAND
TURKEY
BLACK SEA
ASIATIC TURKEY
MEDITERRANEAN SEA
SYRIA
EGYPT
ARABIA
RED SEA
PERSIA
AFGHANISTAN
BELOOCHISTAN
TURKESTAN
SIBERIA
RUSSIAN EMPIRE
MONGOLIA
CHINESE EMPIRE
TIBET
INDIA
BURMAH
SIAM
CEYLON
SUMATRA
ARABIAN SEA
BAY OF BENGAL
INDIAN OCEAN
AFRICA
Equator
Arctic Circle

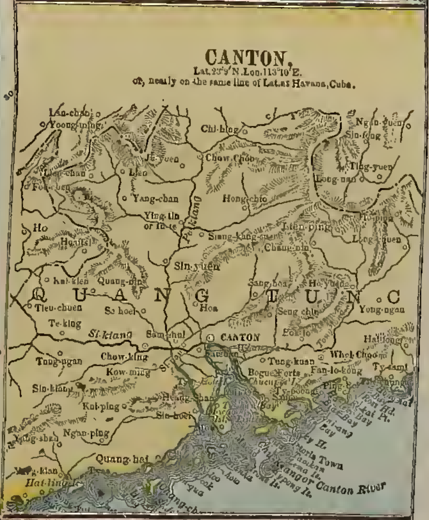

BEHRING SEA
SEA OF OKHOTSK
KURILE ISLANDS
JAPAN
SEA OF JAPAN
YELLOW SEA
MANCHOORIA
Tropic of Cancer
LADRONE IS.
CAROLINE ISLANDS
PHILIPPINE ISLANDS
CHINA SEA
SULU SEA
CELEBES SEA
BORNEO
NEW GUINEA
Equator
PACIFIC OCEAN



JERUSALEM.

Lat. 31°46'N. Lon. 35°15'E.
or nearly on the same line of Lat. as Way Cross, Ga.

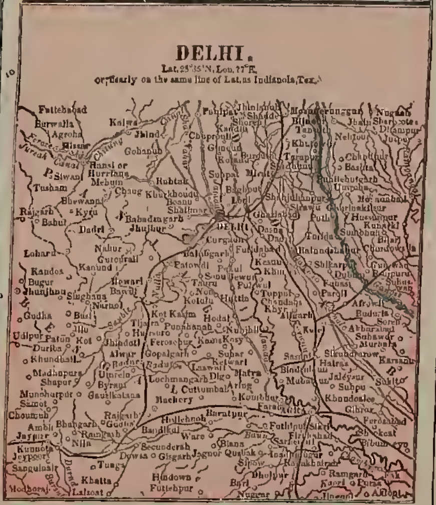
JERUSALEM
DEAD SEA
SALT SEA
SEA OF THE PLAIN



CANTON.

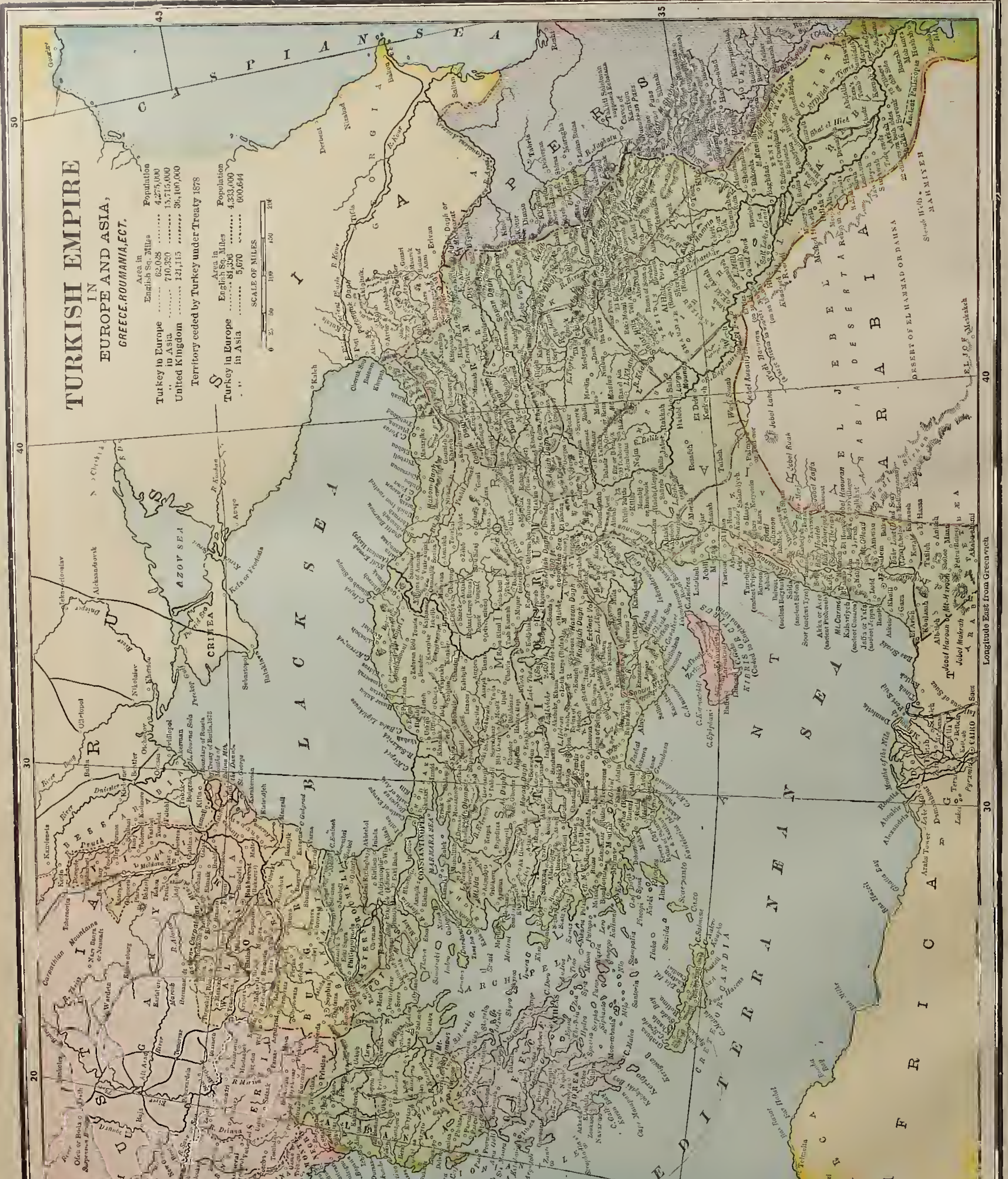
Lat. 23°7'N. Lon. 113°10'E.
or, nearly on the same line of Lat. as Havana, Cuba.

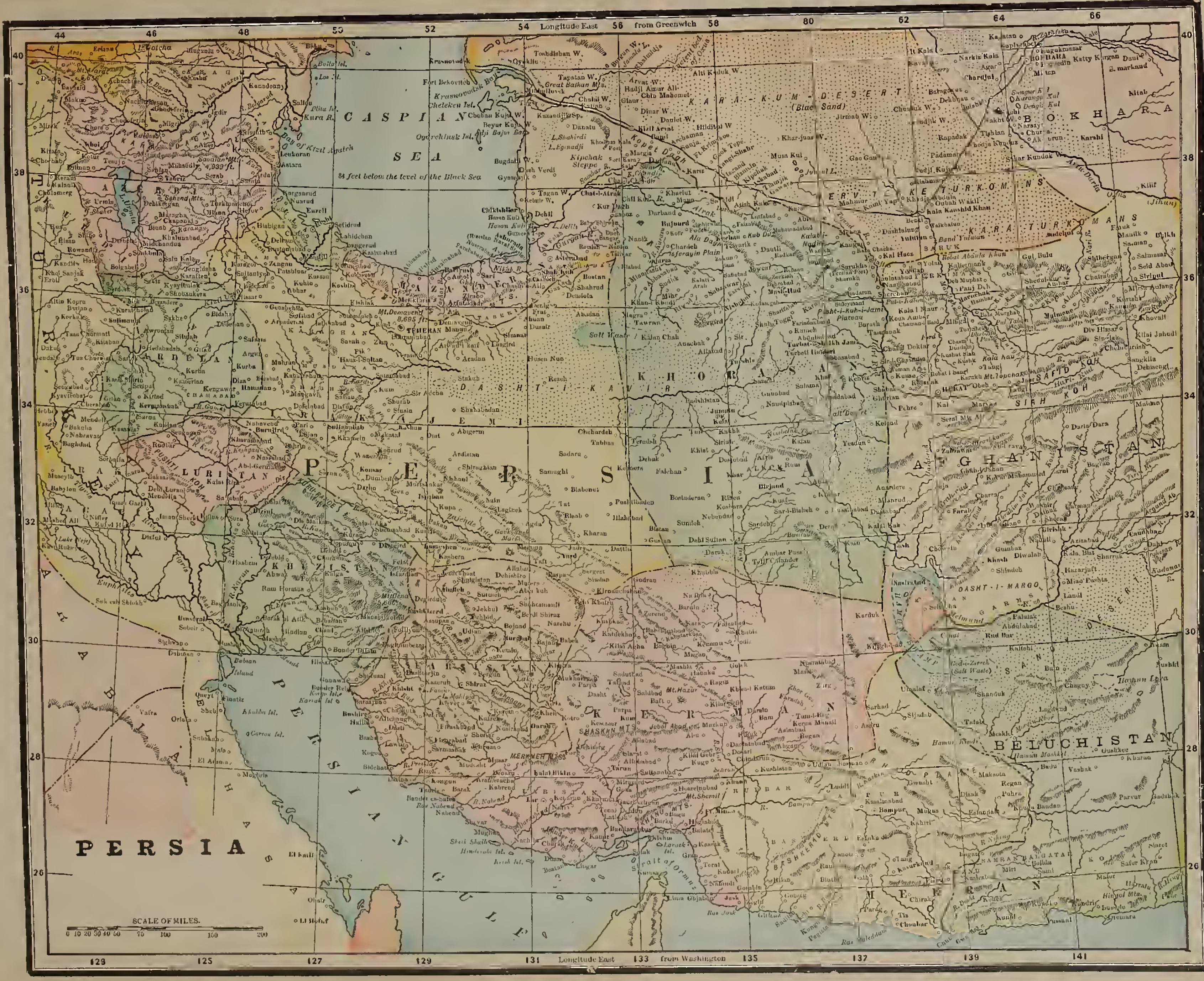
QUANG TUNG
CANTON
Canton River

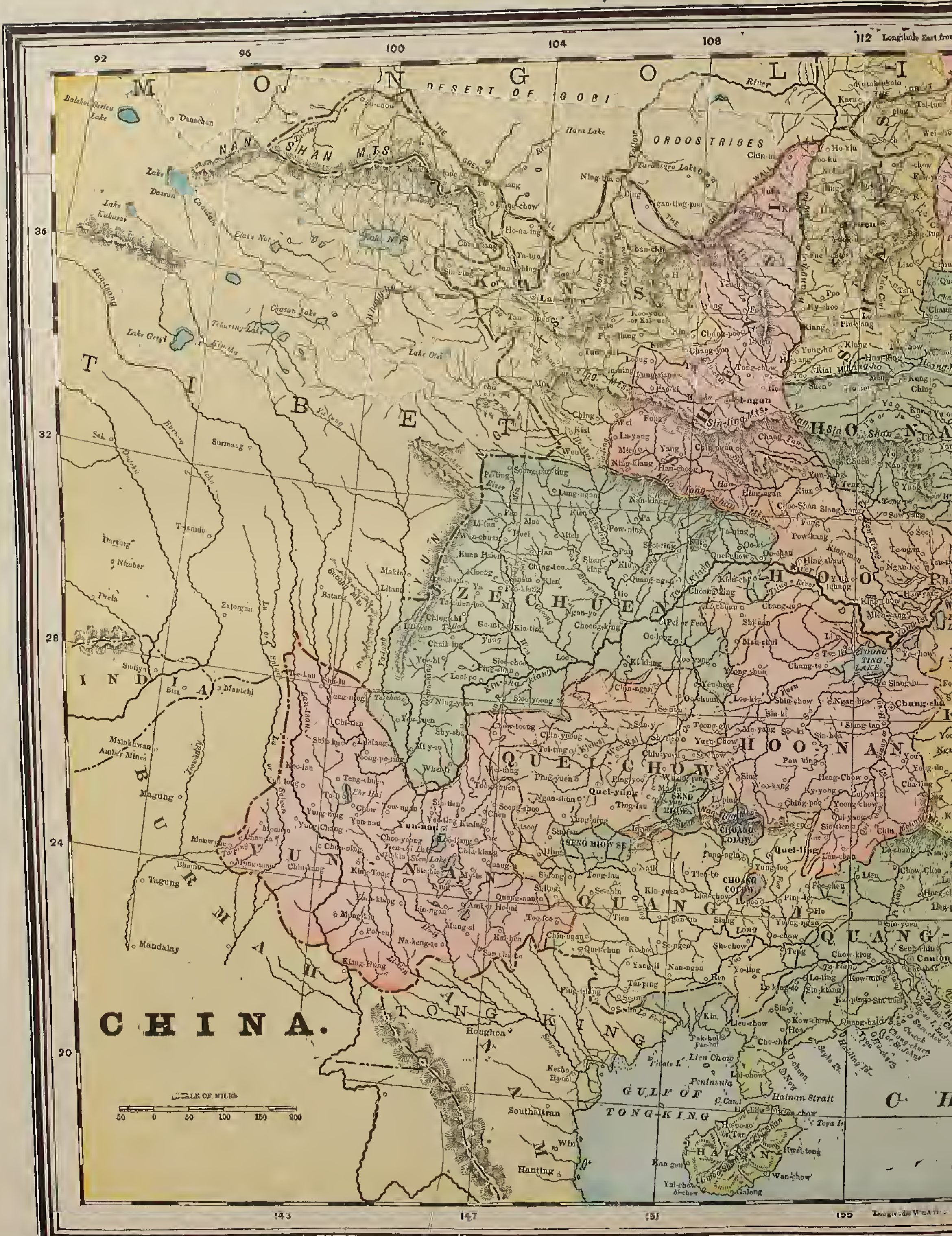


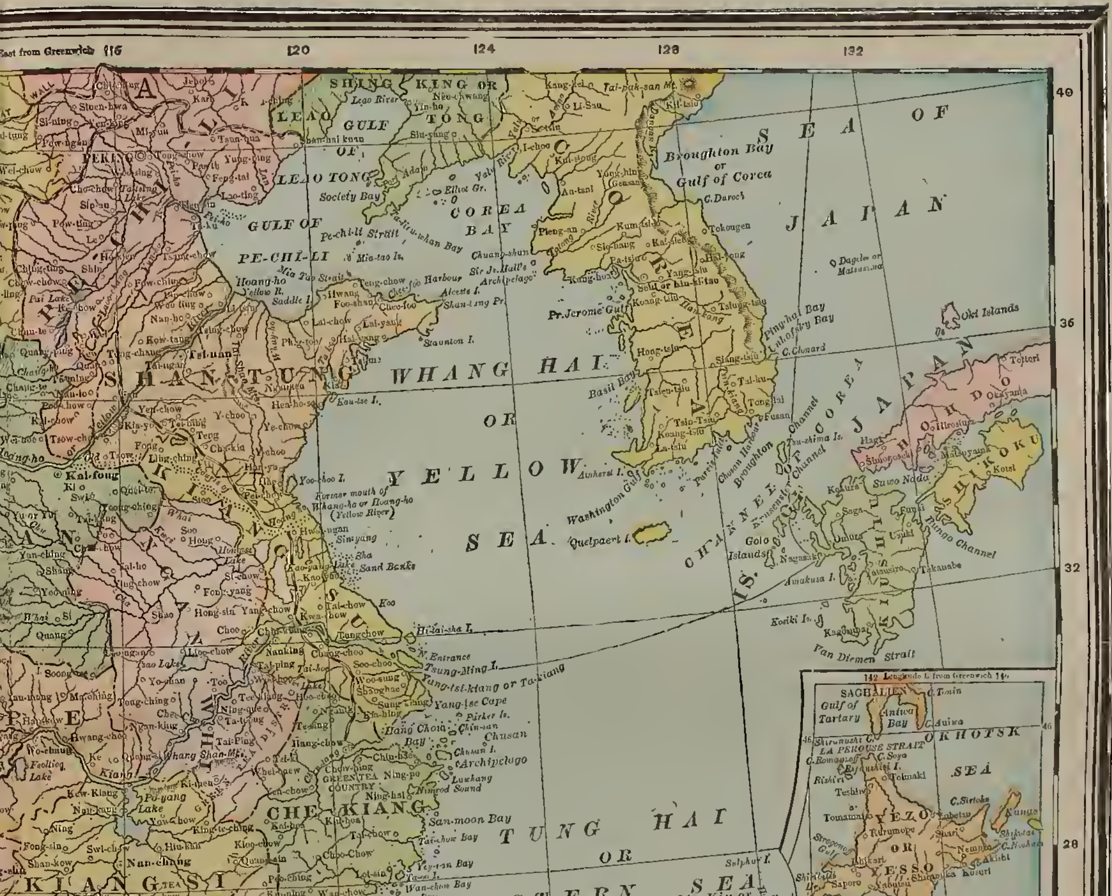
DELHI.

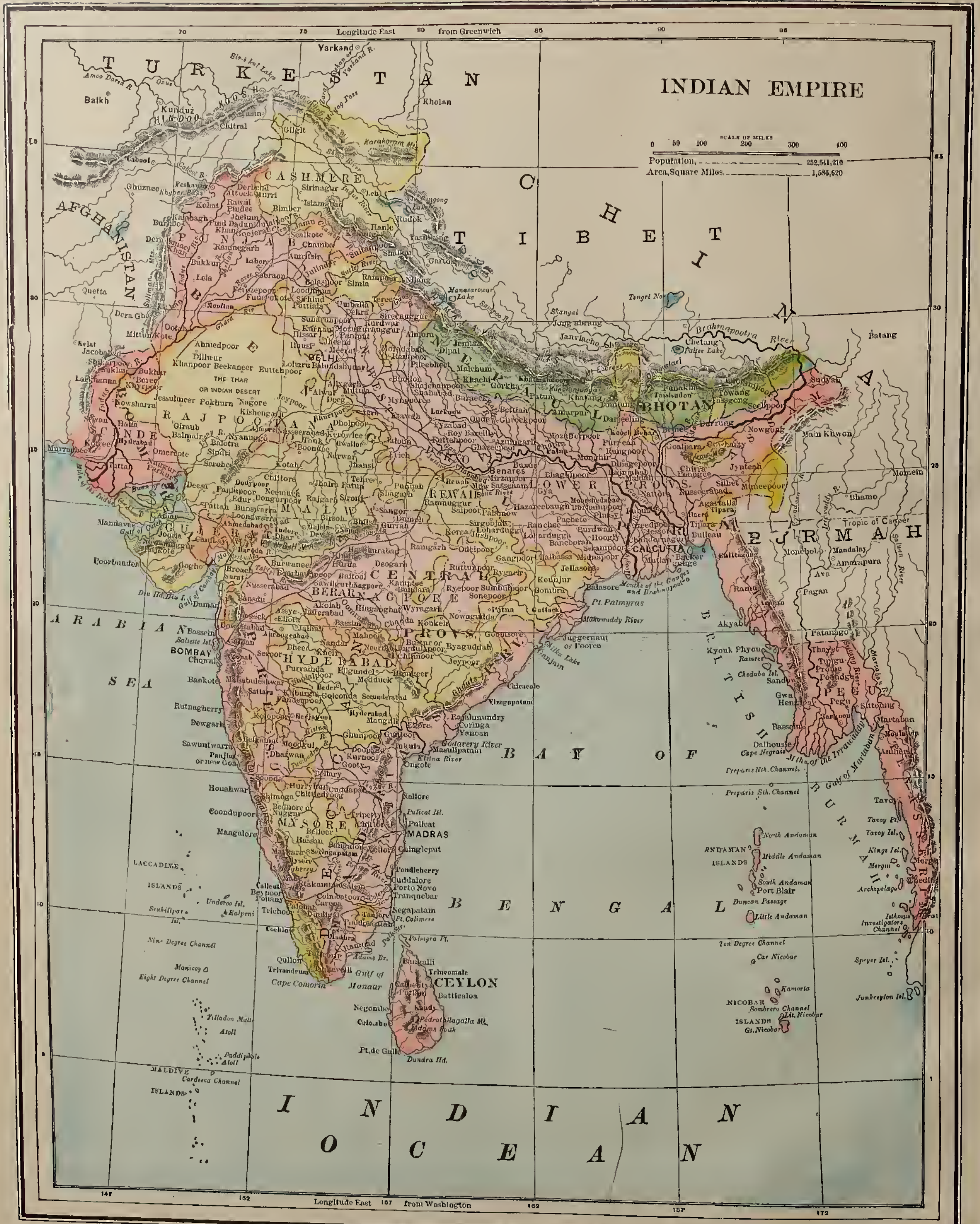
Lat. 28°15'N. Lon. 77°E.
or nearly on the same line of Lat. as Indianola, Tex.

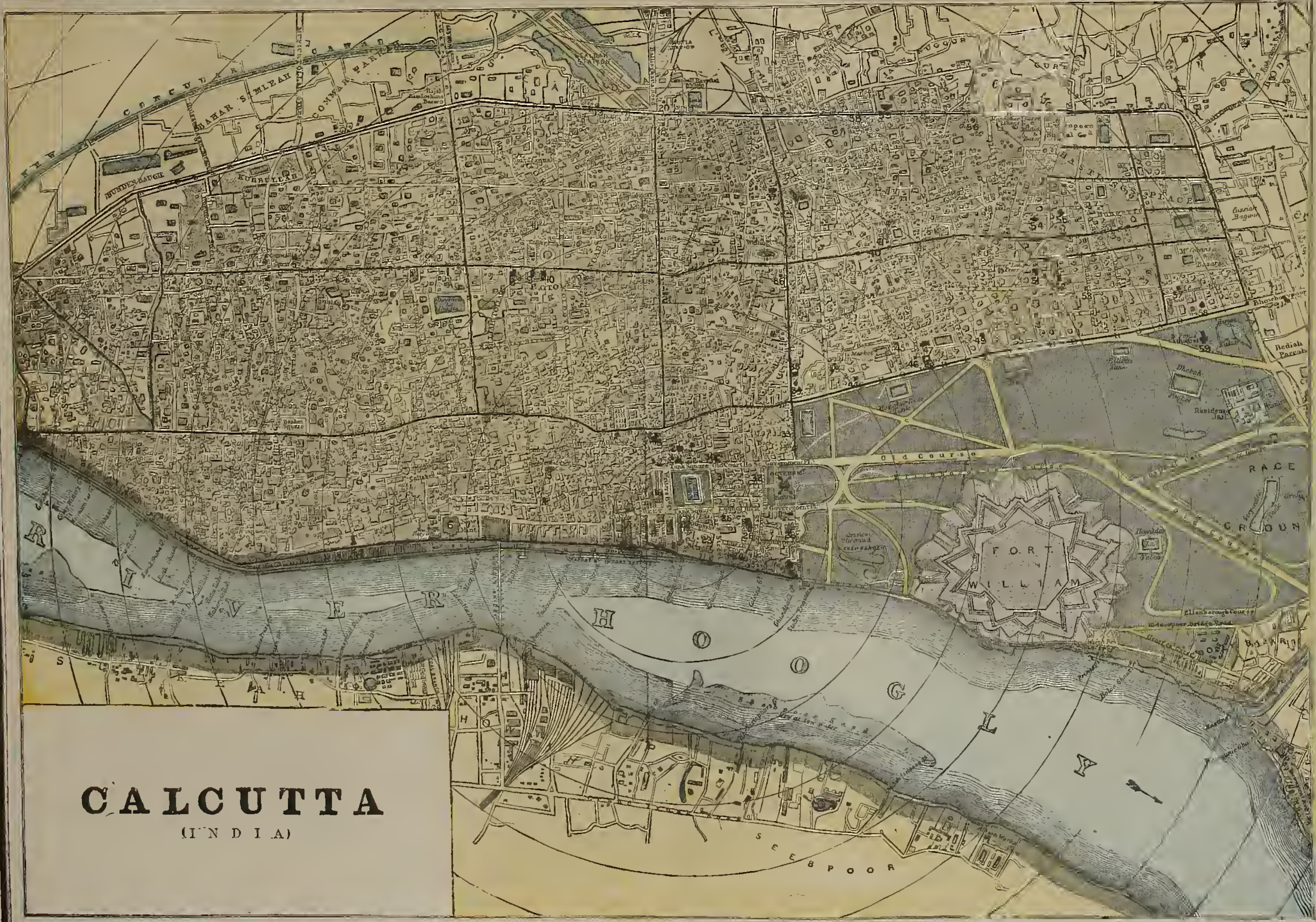

TURKISH EMPIRE
IN
EUROPE AND ASIA,
GREECE, ROUMANIA, ECT.
Area in English Sq. Miles
Population
Turkey in Europe 62,028 4,275,000
" in Asia 710,320 15,715,000
United Kingdom 121,115 36,100,000
Territory ceded by Turkey under Treaty 1878
Turkey in Europe 81,396 4,333,000
" in Asia 5,670 600,644
SCALE OF MILES
0 25 50 100 150 200
CASPIAN SEA
BLACK SEA
AZOV SEA
CRIMEA
MARMARA SEA
ARCHIPELAGO
MEDITERRANEAN SEA
ADRIATIC SEA
IONIAN SEA
RED SEA
AFRICA
ARABIA
RUSSIA
PERSIA
ITALY
CANDIA
KIBRIS OR CYPRUS (Ceded to England 1878)
DESERT OF EL HAMMAD OR DAHNA
Longitude East from Greenwich
20
30
35
40
45
50


PERSIA
SCALE OF MILES.
0 10 20 30 40 50 75 100 150 200
Longitude East from Greenwich
Longitude East from Washington
CASPIAN SEA
84 feet below the level of the Black Sea
PERSIAN GULF
Strait of Ormuz
ARABIA
TURKEY
IRAK ARABI
AZERBIJAN
KURDISTAN
LURISTAN
KHUZISTAN
FARSISTAN
KERMAN
IRAK AJEMI
MAZANDERAN
KHORASSAN
DASHT-I-KAVIR
KARA-KUM DESERT
(Black Sand)
TEKKE TURKOMANS
KARA TURKOMANS
BOKHARA
AFGHANISTAN
DASHT-I-MARGO
SEISTAN
BELUCHISTAN
MEKRAN
TEHERAN
Mt. Demavend 18,695 ft.
L. Urumia
Salt Waste
Tigris
Euphrates

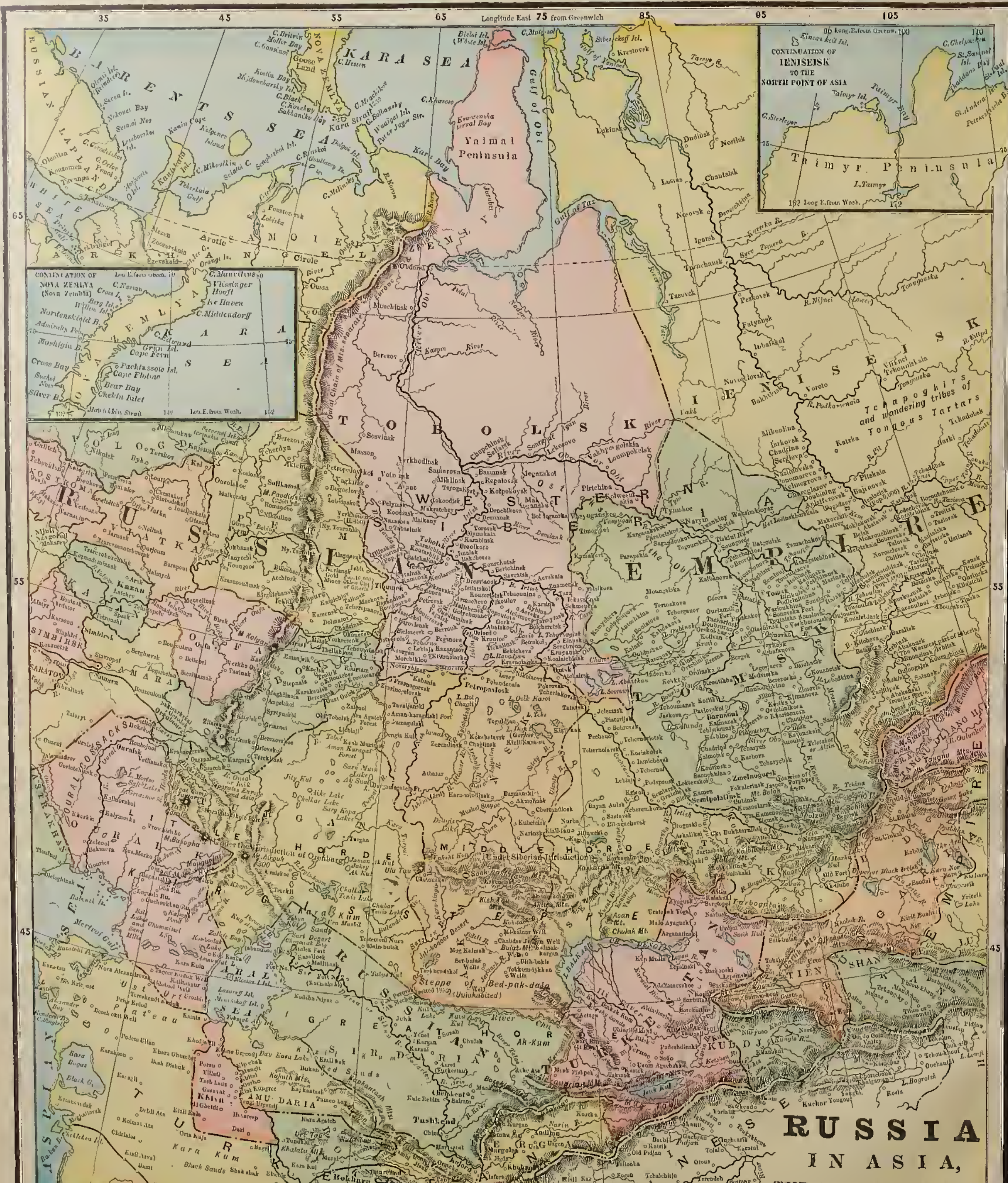

CHINA.
M O N G O L I
DESERT OF GOBI
NAN SHAN MTS
ORDOS TRIBES
T I B E T
I N D I A
B U R M A H
T O N G - K I N G
A N N A M
S Z E - C H U E N
Q U E I - C H O W
Y U N - N A N
H O O - N A N
K A N - S U
Q U A N G - S I
G U L F O F T O N G - K I N G
H A I N A N
Hainan Strait
Lake Gerzi
Lake Kukusar
Chasan Lake
Tchuring Lake
Lake Otsi
Hara Lake
Ehr Hai
TOONG TING LAKE
Amber Mines
Mandalay
Bhamo
Tagung
Manwyne
Hanting
Southaltran
Win
Kesho
Houghoa
Yun-nan
SCALE OF MILES
50 0 50 100 150 200
92
96
100
104
108
112 Longitude East from
36
32
28
24
20
143
147
151
155


East from Greenwich 116
120
124
128
132
40
36
32
28
24
20
SEA OF JAPAN
Broughton Bay or Gulf of Corea
GULF OF LEAO TONG
GULF OF PE-CHI-LI
COREA BAY
WHANG HAI OR YELLOW SEA
Quelpaert I.
SHAN-TUNG
PEKING
Oki Islands
Tsu-shima Is.
Broughton Channel
Van Diemen Strait
CHE-KIANG
KIANG-SI
FO-KIEN
Chusan Archipelago
Ning-po
Fou-chow
TUNG HAI OR EASTERN SEA
Liu Kiu or Loo Choo Is.
Okinawa-sima or Great Loo Choo Is.
Formosa Banks
PESCADORES
Pratas
CHINA SEA
Hong Kong
SAGHALIEN
Gulf of Tartary
LA PEROUSE STRAIT
OKHOTSK SEA
YEZO OR YESSO
TSUGARU STRAIT
NORTH PACIFIC OCEAN
NIPPON
SEA OF JAPAN
TOKIO (Yedo)
Yokohama
SHIKOKU
KIUSHIU
ISLANDS OF JAPAN
Longitude E. from Greenwich 140
Longitude West from Washington 147
West from Washington
159
163
167
171


INDIAN EMPIRE
SCALE OF MILES
0 50 100 200 300 400
Population, 252,541,210
Area, Square Miles 1,586,620
Longitude East from Greenwich
Longitude East from Washington
TURKESTAN
HINDOO KOOSH
AFGHANISTAN
CASHMERE
PUNJAB
TIBET
CHINA
BHOTAN
RAJPOOTANA
SCINDE
THE THAR OR INDIAN DESERT
DELHI
MALWA
GUZERAT
REWAH
CENTRAL PROVS.
LOWER PROVS.
CALCUTTA
BERAR
NAGPORE
HYDERABAD
BOMBAY
MADRAS
MYSORE
CEYLON
BURMAH
PEGU
BRITISH BURMAH
ARABIAN SEA
BAY OF BENGAL
INDIAN OCEAN
LACCADIVE ISLANDS
MALDIVE ISLANDS
ANDAMAN ISLANDS
NICOBAR ISLANDS
Tropic of Cancer
Brahmapootra River
Gulf of Martaban
Gulf of Manaar
Cape Comorin

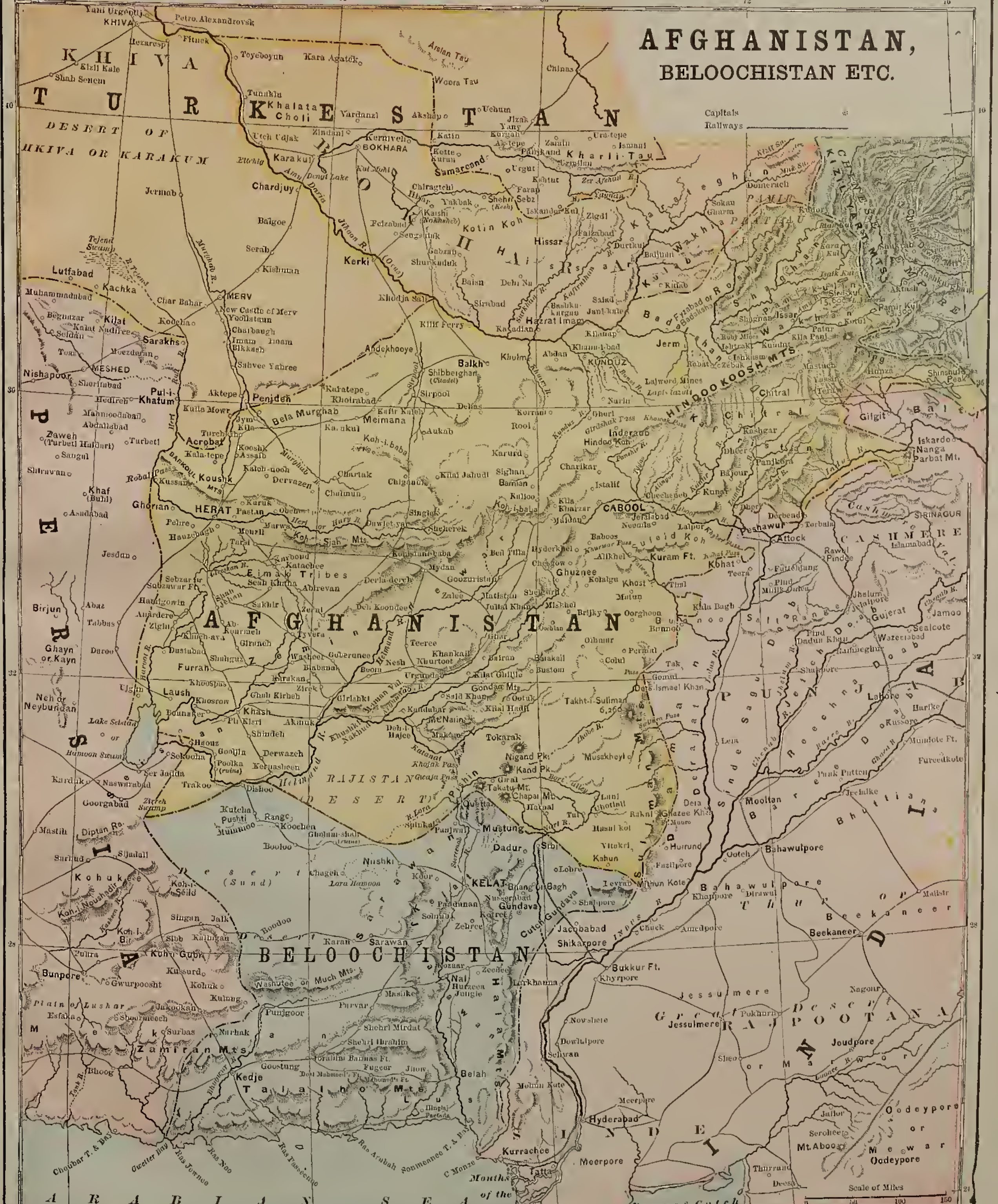

FORT WILLIAM
RACE
GROUND
Old Course
Ellenborough Course
RIVER
HOOGLY
SEEBPOOR

CALCUTTA
(INDIA)


Longitude East 75 from Greenwich
Longitude East from Washington
CONTINUATION OF IENISEISK TO THE NORTH POINT OF ASIA
Thimyr Peninsula
CONTINUATION OF NOVA ZEMLYA (Nova Zembla)
KARA SEA
BARENTS SEA
NOVA ZEMLYA
WHITE SEA
Yalmal Peninsula
Gulf of Obi
Gulf of Taz
Arctic Circle
SAMOIEDI
ARKHANGEL
VOLOGDA
KOSTROMA
VIATKA
PERM
KAZAN
SIMBIRSK
SARATOV
SAMARA
OUFA
ORENBURG
ASTRAKHAN
URAL COSSACKS
TOBOLSK
IENISEISK
TOMSK
WEST SIBERIA
RUSSIAN EMPIRE
Tchapoghirs and wandering tribes of Tongous Tartars
MIDDLE HORDE
Under the Jurisdiction of Orenburg
Under Siberian Jurisdiction
KIRGHIZ
SEMIPOLATINSK
ARAL SEA
CASPIAN SEA
Ust Urt Plateau
TURKESTAN
Kara Kum
Black Sands
AMU DARIA
Khiva
Bokhara
Tashkend
Kokand
Samarkand
Kashgar
Yarkand
TIEN SHAN
KULDJA
CHINESE
PERSIA
Astrabad
Merve
Steppe of Bed-pak-dala (Uninhabited)
Ak-Kum
Red Sands
Issik Kul
Lake Balkash
Tarbagatai
Altai
SCALE OF MILES
35
45
55
65
75
85
95
105
132
142
152
162
65
55
45

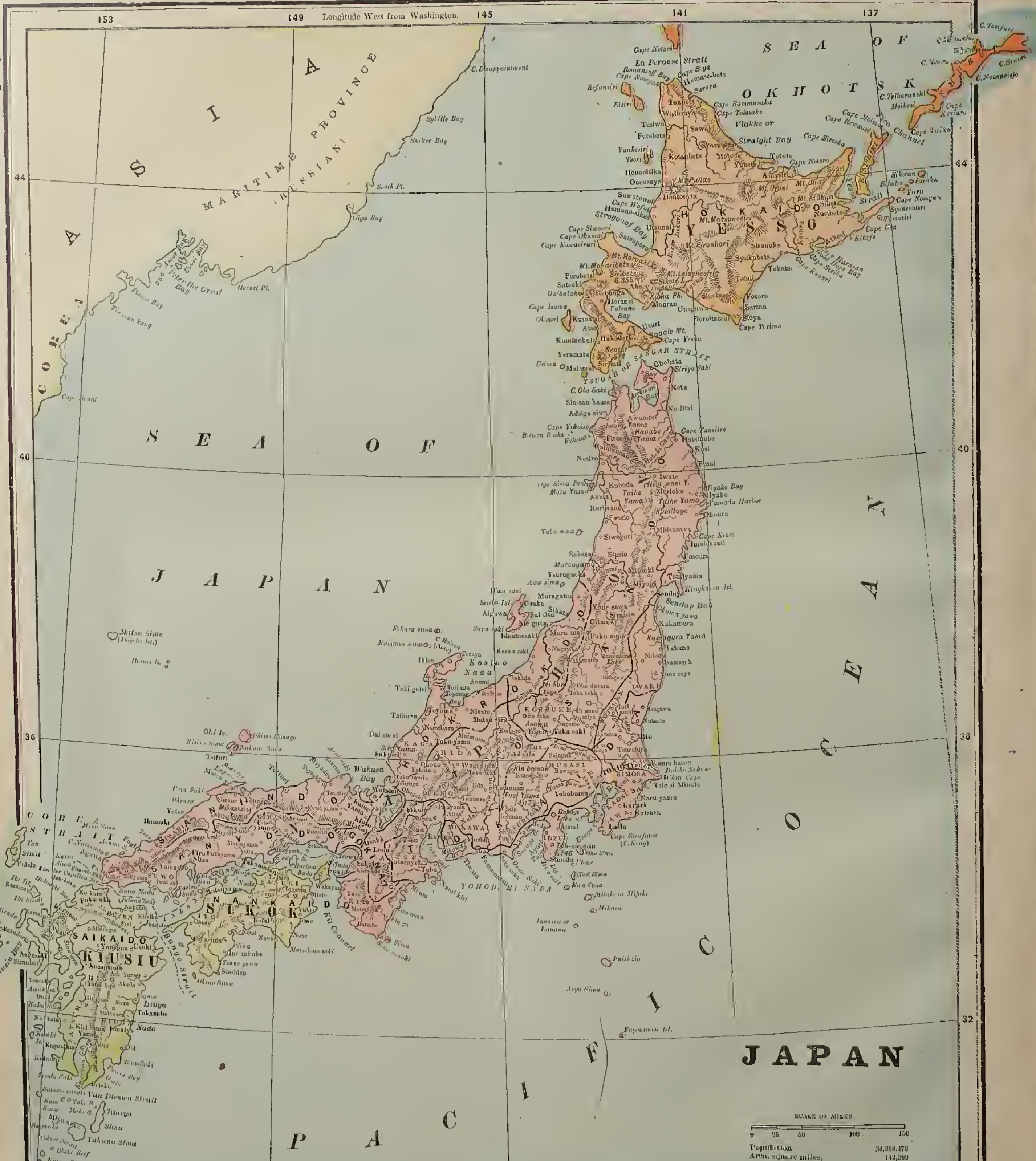
RUSSIA
IN ASIA,
TURKESTAN & ETC.

ENGRAVED FOR
Standard Atlas of the World.



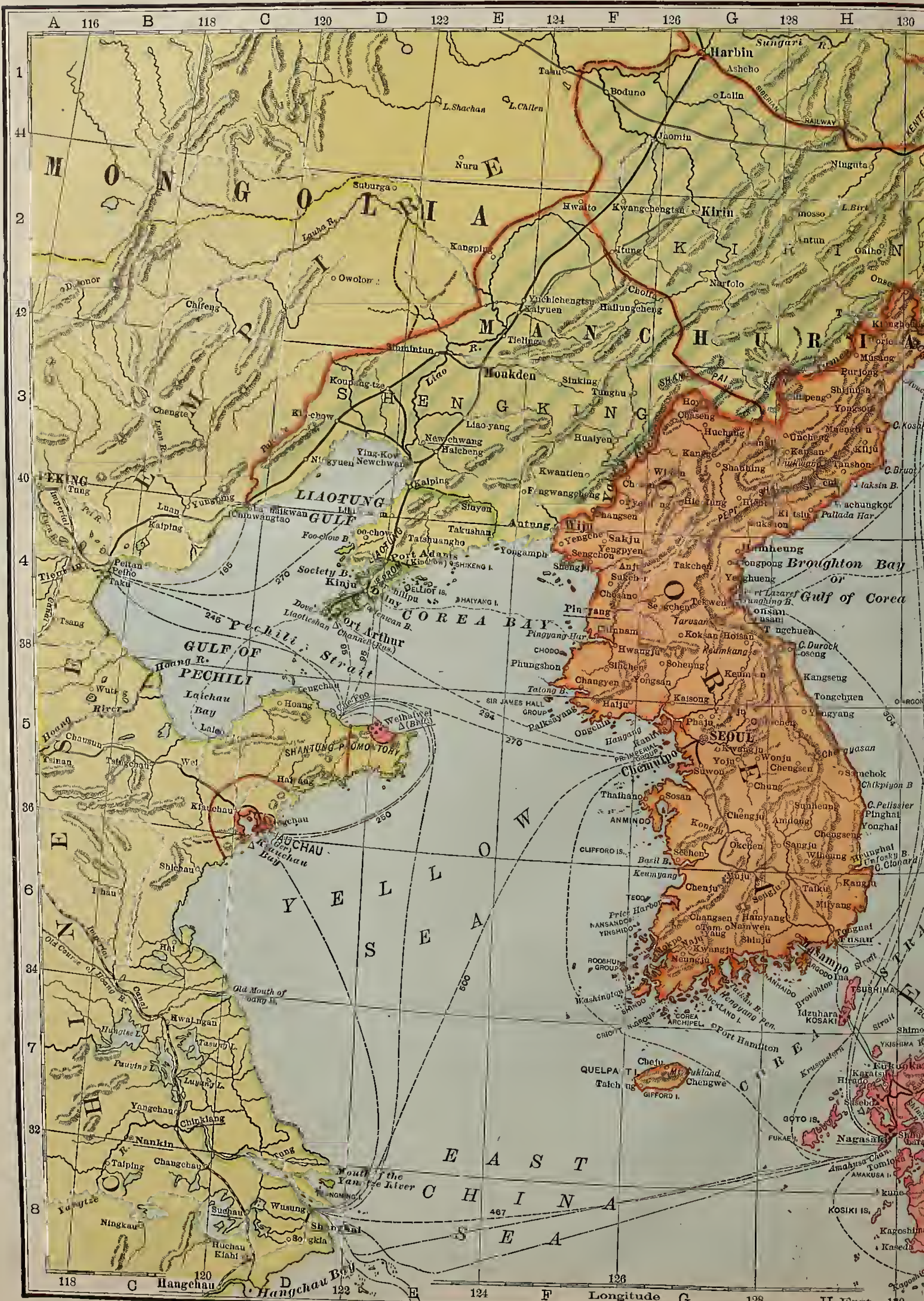
AFGHANISTAN, BELOOCHISTAN ETC.

Capitals
Railways
TURKESTAN
KHIVA
BOKHARA
Desert of Khiva or Karakum
Samarcand
Merv
Meshed
Herat
Cabool
Kandahar
Ghuznee
Peshawur
Kelat
PERSIA
AFGHANISTAN
BELOOCHISTAN
INDIA
PUNJAB
CASHMERE
RAJPOOTANA
Hindoo Koosh Mts.
Pamir
Hyderabad
Kurrachee
Mouths of the Indus
Runn of Cutch
ARABIAN SEA
Scale of Miles
Longitude East from Greenwich
60
64
68
72
76
40
36
32
28
24


JAPAN
Longitude West from Washington
153
149
145
141
137
Longitude East from Greenwich
134
138
142
44
40
36
32
SCALE OF MILES
0
25
50
100
150
Population 34,338,479
Area, square miles, 149,399
A S I A
MARITIME PROVINCE (RUSSIAN)
COREA
SEA OF JAPAN
SEA OF OKHOTSK
PACIFIC OCEAN
COREA STRAIT
Peter the Great Bay
C. Disappointment
Sybille Bay
South Pt.
Olga Bay
Hornet Pt.
Cape Notoro
La Perouse Strait
Romanzoff Bay
Cape Soya
Cape Nossyab
Refunsiri
Risiri
Soya
Teshwo
Furebets
Kotanbets
Cape Rommusuka
Cape Tokusake
Vlakke or Straight Bay
Cape Siretoko
Cape Notoro
Cape Moime
Cape Revautt
Pico Channel
C. Triburanski
Moikesi
Cape Raikai
C. Nononeisjo
C. Tonfuri
Sikotan
Suwotowo
Cape Wofus
Stroganoff Bay
Cape Simosoi
Cape Okamai
Cape Kamakurari
Mt. Matsunesiri
Mt. Pirinohori
Mt. Ohazi
Mt. Akkesi
Mt. Atiosa
YESSO
HOKKAIDO
Mt. Makaribets
Siribets 6,555
Volcano Bay
Cape Isuma
Okosori
Hakodate
Sagale Mt.
Cape Yesan
Kumaishi
Matsmai
Usima
TSUGAR OR SANGAR STRAIT
Cape Erimo
Oyoro
Samu
Sioya
C. Oko Saki
Aomori Bay
Hanabe Yama
Cape Taneitre
Hatsinohe
Iwate Yama
Morioka
Taihe Yama
Miyako Bay
Yamada Harbor
Kamitoge
Akita
Cape Kiori
Sakata
Sendai
Sendai Bay
Kingkasan Isl.
Sado Isl.
Niegata
Nanao
Kosino Nada
Toyama Bay
Takayama
Wakasa Bay
Asama Yama
Tokio
Yokohama
Fusi Yama 14,177
Musasi
Simosa
Kadsusa
Awa
Idzu
Mikawa
Owari
Nagoya
Ise
Kii
Kii Channel
Osaka
Kioto
Miyako
Sikok
Nankaido
Sanyodo
Sanindo
Hokurokudo
Tokaido
Tosando
Saikaido
Kiusiu
Bungo Strait
Suwo Nada
Inland Sea
Higo
Kagosima
Nagasaki
Van Diemen Strait
Tanega Sima
Yakuno Sima
Tsu Sima
Iki
Hirado
Oki Is.
Miuka Sima
Mikura
Hachijo
Hihoe Sima
Foulai Sio
Dagelet Isl.

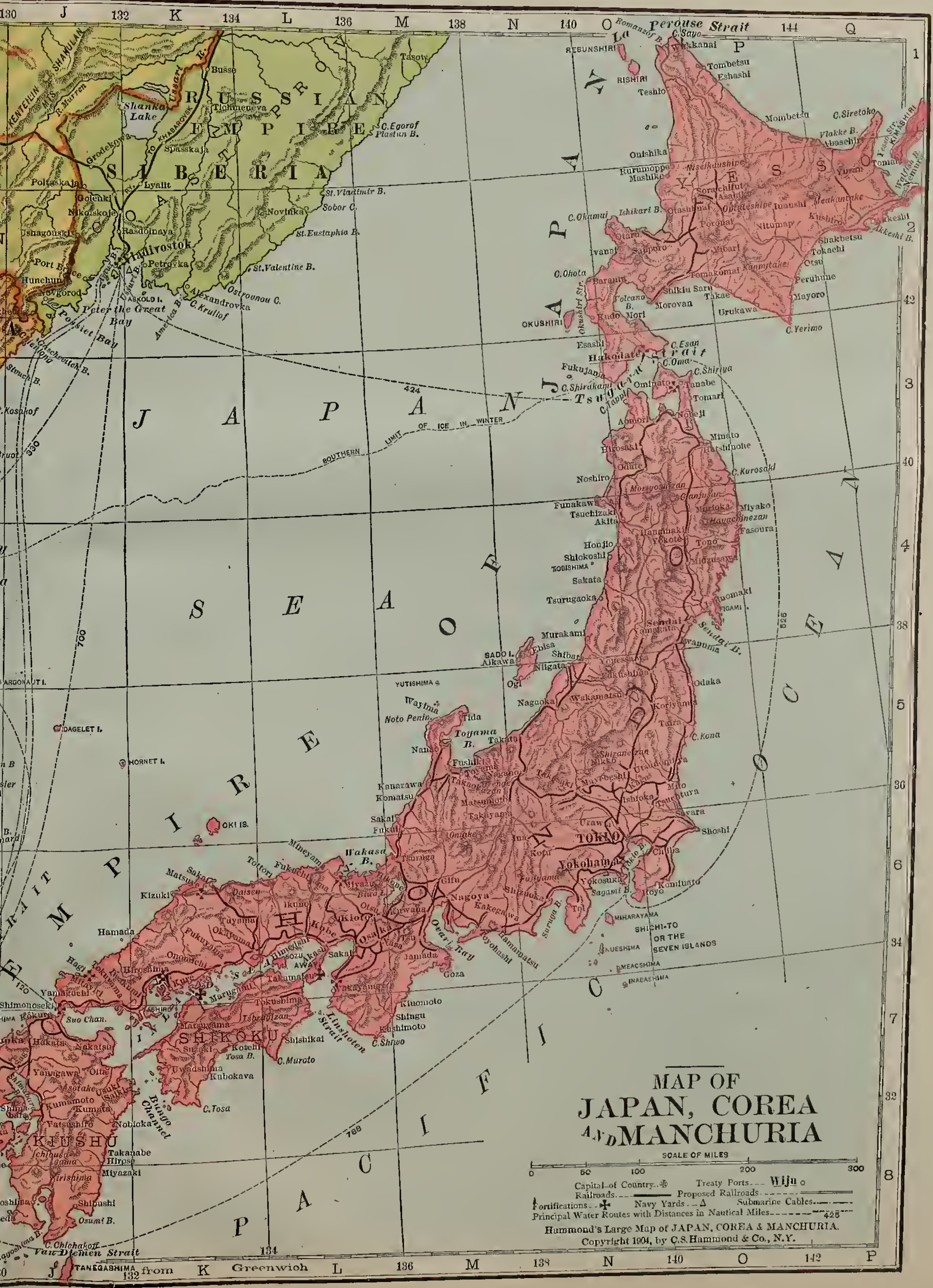
Compliments of THE HOM

56 Cedar Street,


MONGOLIA
MANCHURIA
SHENGKING
KIRIN
COREA
SEOUL
PEKING
Harbin
Mukden
Port Arthur
Dalny
Newchwang
Liaoyang
Kirin
Antung
Wiju
Pingyang
Chemulpo
Fusan
Masampo
Gensan
Kiauchau
Weihaiwei (Brit.)
Chefoo
Tientsin
Taku
Nankin
Shanghai
Hangchau
Nagasaki
TSUSHIMA
QUELPART I.
Port Hamilton
LIAOTUNG GULF
COREA BAY
GULF OF PECHILI
Pechili Strait
Laichau Bay
SHANTUNG PROMONTORY
YELLOW SEA
EAST CHINA SEA
Broughton Bay or Gulf of Corea
Corea Strait
Hangchau Bay
Mouth of the Yangtze River
Old Mouth of Hoang R.
Sungari R.
Siberian Railway
L. Shachan
L. Chilen
Yalu R.
Hoang R.
A 116 B 118 C 120 D 122 E 124 F 126 G 128 H 130
1 2 3 4 5 6 7 8
44 42 40 38 36 34 32
Longitude East

ME INSURANCE COMPANY

t, New York, N. Y.



RUSSIAN EMPIRE
SIBERIA
Vladivostok
Peter the Great Bay
Possiet Bay
Shanka Lake
Busse
Tichmenevn
Spasskaja
Grodekowa
Lyalit
Nikolskoje
Poltaskaja
Rasdolnaya
Petrovka
Novinka
Tasov
C. Egorof
Plastun B.
St. Vladimir B.
Sobor C.
St. Eustaphia B.
St. Valentine B.
Ostrounou C.
Alexandrovka
C. Krullof
America B.
Askold I.
Hunchun
SEA OF JAPAN
SOUTHERN LIMIT OF ICE IN WINTER
JAPAN
YESSO
La Perouse Strait
C. Soya
Wakkanai
Rebunshiri
Rishiri
Teshio
Tombetsu
Eshashi
Mombetsu
C. Siretoko
Abashiri
Kunashiri
Nemuro
Onishika
Rurumoppe
Mashike
Ishikari B.
Otaru
Sapporo
Asahi
Iwanai
Kushiro
Akkeshi B.
Tokachi
Urakawa
C. Yerimo
Tomakomai
Muroran
Volcano B.
Mori
Okushiri
Esashi
Hakodate
C. Esan
Tsugaru Strait
C. Oma
C. Shiriya
Aomori
Hirosaki
Noshiro
Odate
C. Kurosaki
Funakawa
Akita
Morioka
Miyako
Honjo
Sakata
Tsurugaoka
Ishinomaki
Sendai
Sendai B.
Yamagata
Sado I.
Aikawa
Niigata
Fukushima
Wakamatsu
Nagaoka
Yutishima
Noto Penin.
Toyama B.
Takata
Kanazawa
Komatsu
Nikko
Utsunomiya
Mito
Shoshi
Fukui
Tsuruga
Tokio
Yokohama
Yokosuka
Chiba
Sagami B.
Shizuoka
Suruga B.
Nagoya
Gifu
Owari Bay
Kioto
Osaka
Kobe
Nara
Wakayama
Shingu
Linshoten Strait
Oki Is.
Dagelet I.
Hornet I.
Kizuki
Matsue
Hamada
Hagi
Tottori
Okayama
Himeji
Hiroshima
Kure
Shimonoseki
Yamaguchi
Suo Chan.
Takamatsu
Tokushima
Matsuyama
SHIKOKU
Kochi
Tosa B.
C. Muroto
Uwadshima
C. Tosa
Bungo Channel
KIUSHU
Kumamoto
Oita
Nobioka
Miyazaki
Kagoshima
C. Chichakoff
Van Diemen Strait
Tanegashima
Osumi B.
Miharayama
Shichi-to or the Seven Islands
PACIFIC OCEAN
Longitude 132 from Greenwich

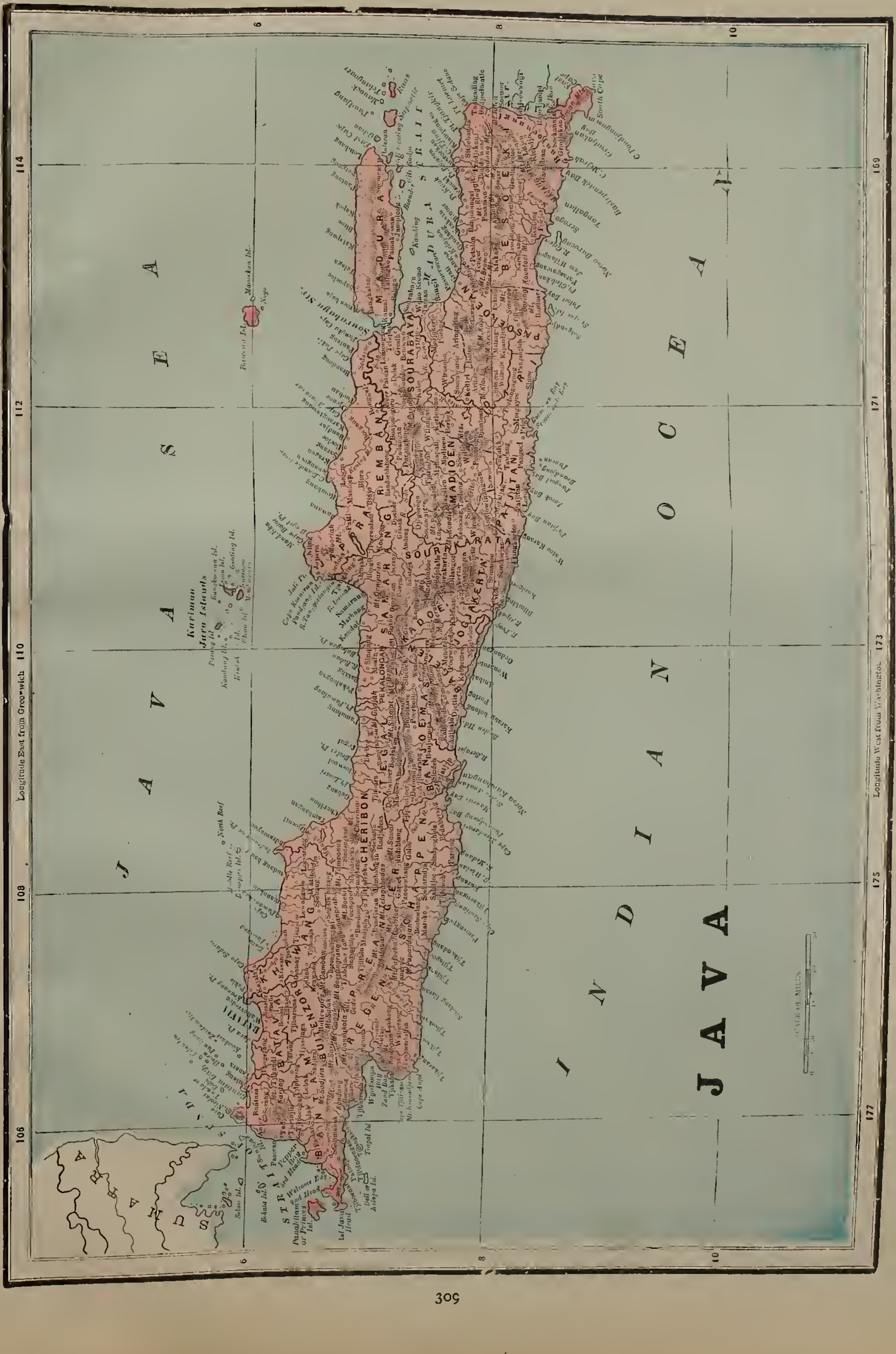
MAP OF JAPAN, COREA AND MANCHURIA

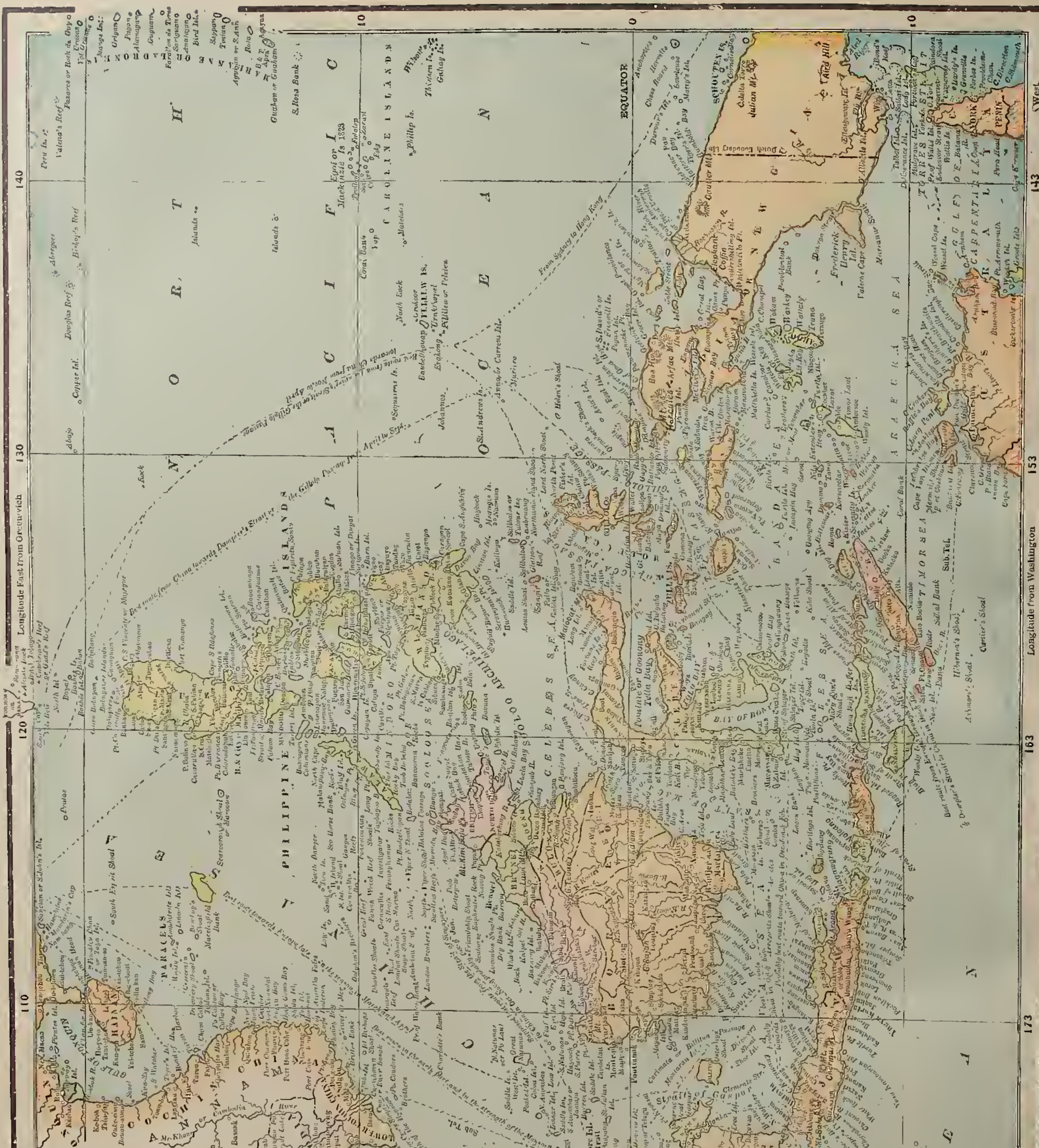
SCALE OF MILES

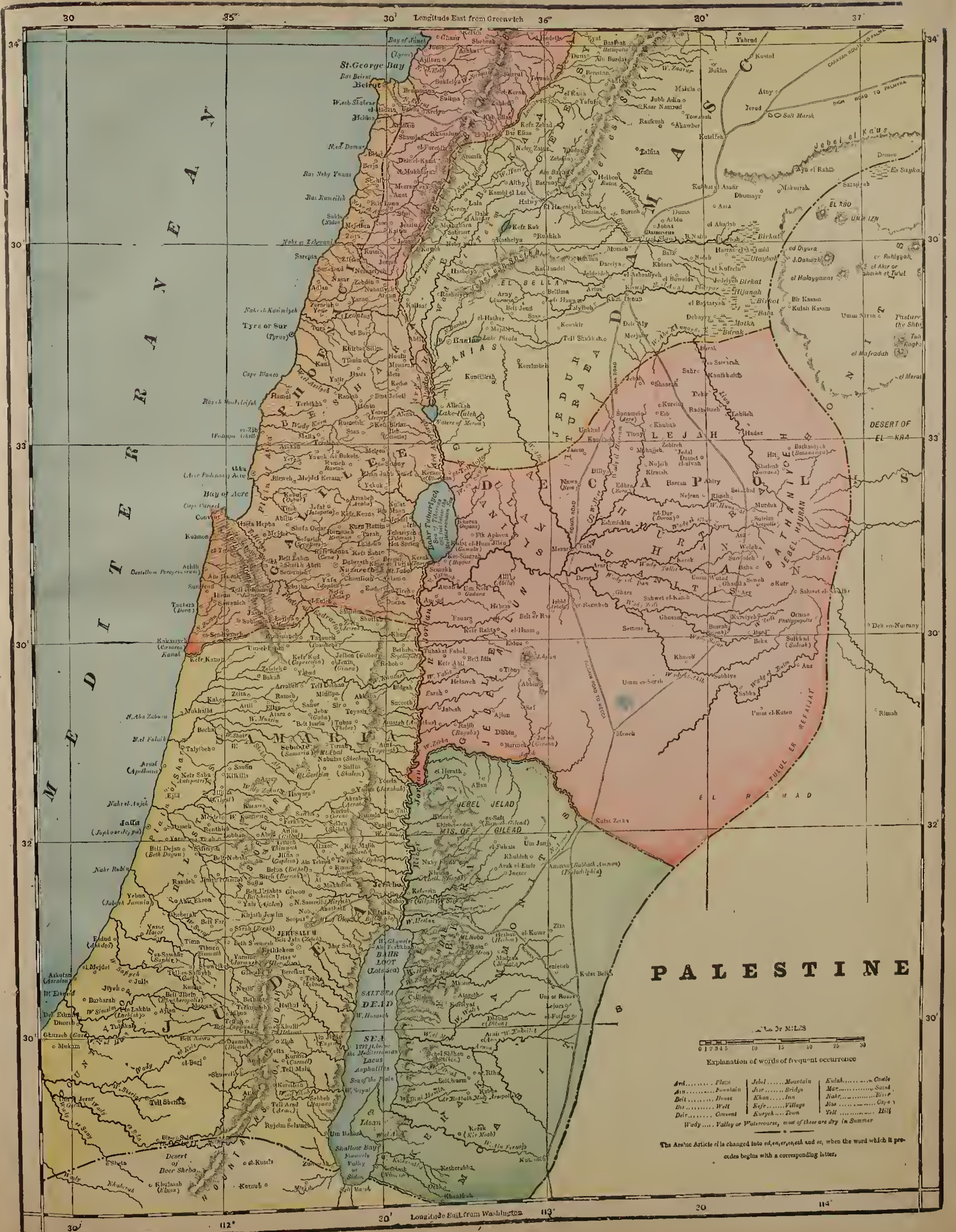
0 50 100 200 300

Capital of Country ✲ Treaty Ports Wiju ○
Railroads —— Proposed Railroads - - - -
Fortifications ✠ Navy Yards △ Submarine Cables
Principal Water Routes with Distances in Nautical Miles - - 425 - -

Hammond's Large Map of JAPAN, COREA & MANCHURIA.
Copyright 1904, by C.S. Hammond & Co., N.Y.


JAVA
JAVA SEA
INDIAN OCEAN
SUMATRA
STRAIT OF SUNDA
MADURA STRAIT
MADURA
Karimon Java Islands
Bawean Isl.
Longitude East from Greenwich
Longitude West from Washington
Scale of Miles
BANTAM
BATAVIA
BUITENZORG
KRAWANG
PREANGER REGENCIES
CHERIBON
TEGAL
PEKALONGAN
BANJOEMAS
BAGELEN
KEDOE
SAMARANG
DJOKJAKARTA
SOERAKARTA
REMBANG
MADIOEN
KEDIRI
SOURABAYA
PASOEROEAN
PROBOLINGGO
BESOEKI
BANJOEWANGI
PATJITAN
106
108
110
112
114
6
8
10
169
171
173
175
177


EAST INDIES
SCALE OF MILES
Longitude East from Greenwich
Longitude from Washington
East
West
EQUATOR
PHILIPPINE ISLANDS
CAROLINE ISLANDS
PARACELS
BORNEO
CELEBES SEA
JAVA SEA
ARAFURA SEA
TIMOR SEA
GULF OF CARPENTARIA
NEW GUINEA
NORTH PACIFIC OCEAN
INDIAN OCEAN
GULF OF SIAM
ANNAM
BURMAH
SIAM
CAMBODIA
COCHIN CHINA
GULF OF TONQUIN
STRAIT OF MALACCA
SUMATRA
CHINA SEA
CELEBES
MOLUCCAS
BANDA SEA
SOOLOO SEA
AUSTRALIA
TORRES STRAIT
BAY OF BONI
Christmas Isl.
From Sydney to Hong Kong
100
110
120
130
140
10
20
0
177
173
163
153
143


Longitude East from Greenwich
Longitude East from Washington
PALESTINE
SCALE OF MILES
0 1 2 3 4 5 10 15 20 25 30
Explanation of words of frequent occurrence
Ard........ Plain
Ain........ Fountain
Beit........ House
Bir........ Well
Deir........ Convent
Jebel...... Mountain
Jisr...... Bridge
Khan..... Inn
Kefr...... Village
Kuryeh.... Town
Kulah........ Castle
Mar........ Saint
Nahr........ River
Ras........ Cape
Tell........ Hill
Wady..... Valley or Watercourse, most of these are dry in Summer
The Arabic Article el is changed into ed, en, er, es, esh and ez, when the word which it precedes begins with a corresponding letter.
MEDITERRANEAN SEA
PHOENICIA
GALILEE
SAMARIA
JUDEA
DAMASCUS
GAULANITIS
DECAPOLIS
ITURAEA
TRACHONITIS
AURANITIS
BATHANEA
LEJAH
HAURAN
PERAEA
MOAB
GILEAD
BANIAS
EL BELLAN
EL HAMAD
DESERT OF EL-KAA
St. George Bay
Beirut
Sidon
Tyre or Sur (Tyrus)
Akka (Acre)
Bay of Acre
Nazareth
Jaffa (Joppa)
JERUSALEM
Bethlehem
Hebron
Damascus
Lake Huleh (Waters of Merom)
Bahr Tubariyeh (Sea of Tiberias)
SALT SEA
DEAD SEA
Lacus Asphaltites
Jordan
Rabbath Ammon (Philadelphia)
Kerak (Kir Moab)
Desert of Beer Sheba

KEY TO VIEW OF HOLY LAND.

No. 1--BAALBEC.

Heliopolis, or City of the Sun," as it is sometimes called, is situated in the valley between the Lebanon and Anti-Lebanon ranges of mountains, 160 miles north of Jerusalem. The Temple was of great extent, being 500 by 900 feet on either side. A part of the main building is still standing, supported by columns of immense size and length,—some of them being 60 feet high and from four to six feet in diameter. On the top of these columns are beautiful Corinthian capitals, finely carved, equal or superior to anything found in this country. At one place amid the ruins are found six of these immense columns standing upright, not having been shaken down by the earthquake. They can be seen at a long distance.

No. 8--DAMASCUS,

Is situated 147 miles east of the Anti-Lebanon range of mountains, on the plain, surrounded by large olive groves and mulberry trees, poplars, terebinths, etc., and looks beautiful from a distance. It is called "The Gem of the East"; the "Pearl of the Orient." It is a place of 120,000 inhabitants; is surrounded by walls, and has many beautiful mosques and minarets which look picturesque and graceful, seen from a distance. The river Abana runs through the city, supplying the inhabitants with water. The river Pharpar also runs across the plain south of the city and the whole plain is thus watered, and produces abundant crops. Damascus has a history of 4,000 years. Abraham obtained his here, on his way to the Holy Land. Naaman, the leper, lived here; Benhadad, also. I. Kings, 15-18.

No. 21, BEIRUT,

Is on the coast, 147 miles from Jerusalem, and is the seaport of Damascus, the capital of Lebanon, and has 80,000 inhabitants, 12 newspapers, many common schools, 3 Female Seminaries, 1 Medical College, a Normal School, and 8 High Schools.

No. 24, SIDON,

One of the oldest cities mentioned in the Bible, is situated also on the sea, and was founded by Sidon, the son of Canaan. It is a place of 10,000 inhabitants. Around and in the suburbs of the city are immense orange groves, and tropical fruits of all kinds grow there, also.

No. 34,--DAN,

A city in the north of Palestine, 25 miles north of the Sea of Galilee, situated on a hill at the base of Mt. Hermon. There are some old ruins to be found, placed in an oval form, covering about three-quarters of an acre. From the west side of the hill flows one of the tributaries of the Jordan River. Here the golden calf was set up to worship, by Jeroboam; here the tribe of Dan lived, 149 miles north of Beersheba.

No. 55, TYRE,

Is also on the coast, and about 25 miles south of Sidon. It is built out on a peninsula or neck of land extending into the sea. It was formerly on an island, and was strongly fortified—so much so that Nebuchadnezzar laid siege to the city for a space of twelve years without success, and abandoned it; but Alexander captured it after a siege of six months, building a bridge or causeway out to the island with the ruins of the old city. It is a city of 8,000 inhabitants to-day, and a "place to spread nets upon."

No. 57,--ACCHO,

Or Ptolmais, is 8 miles north of Mt. Carmel, on the Bay of Accho, a picturesque looking city of about 8,000 inhabitants. It was so strong a city that the Israelites never completely subdued it. Viewed from the north, at a little distance off, the city appears planted with trees, and presents an attractive appearance; but within the streets are narrow and dirty. It was here that the most fearful and bloody contest of the Crusades took place, and it was the last place of any importance in which the Crusaders held out against the Saracens. Its common European name is St. Jean de Acre.

No. 102,--NAZARETH,

Is found in the picture of the Holy Land 65 miles north of Jerusalem, in a valley, amid the hills of Galilee. It is picturesquely situated, as it is surrounded on all sides by hills, with a beautiful valley opening out in front of it. It is a place of 8,000 inhabitants. It was the home of our Saviour during his childhood. The fountain from whence the inhabitance draw water is a little way out of the city. The hill of precipitation, over which the enraged Jews would have thrown the Saviour, is a little to the north-west.

No. 119, SAMARIA,

Is 30 miles, a little west of north from Jerusalem, situated on a hill that rises up out of a beautiful valley. It was once the capital of Israel, and was built by Omri, and surrounded with a wall, B. C. 925. It was rebuilt by Herod in the time of our Saviour, and many beautiful palaces erected, the columns of which stand to-day in many places, some of them 30 feet in height, with Corinthian capitals on the top. Here is found the reputed tomb of John the Baptist, covered by the ruins of the church called by his name—found on the top of the hill.

150, JERUSALEM,

The "Holy City," is situated among the mountains, 2,540 feet above the level of the Mediterranean Sea; is a city of 30,000 inhabitants of various sects and denominations—Mahommedans, Jews, Turks, Christians, &c. The city stands on the site of the old city, 80 feet above the original foundation, on Mt. Zion and Mt. Moriah. The walls of the city are from 30 to 75 feet in height and 12 feet in thickness. There are 10 gates, 5 open and 5 closed. The streets are very narrow. The prominent buildings in the city are the Church of the Holy Sepulchre, Mosque of Omar, Jewish and Arminian Synagogues, Mosque of Elaksa, Church of St. Ann, Castle of Goliah, etc. Seen from the Mt. of Olives, the city looks picturesque, but it is now only a shadow of its former greatness and beauty—when it was the wonder of the world and "the joy of the whole earth."

193, BETHANY,

Is found just over the Mount of Olives, 2 miles from Jerusalem, on the road to Jericho. It is a small village, where some ancient ruins are to be found.

190, BETHLEHEM,

Is 5 miles south of Jerusalem, on a hill, and a city of 8,000 inhabitants. A large church stands over the place where tradition says that the Saviour was born. In one of the large rooms lamps are kept continually burning, and in the floor is a silver star which indicates the place, over the cave, where the shepherds are said to have found the Saviour in the manger.

208, HEBRON,

Is situated in a valley, 18 miles south of Jerusalem, and contains about 10,000 inhabitants. It was the home of Abraham, and no doubt his remains could be found to-day in the cave of Machpelah, where he was buried, and where he buried his wife Sarah.

233.--DEAD SEA,

The Dead Sea is a singular body of water, being 46 miles long and 10 miles wide, surrounded by high and rugged mountains, 2,000 and 3,000 feet in height. The water is one-quarter salt, and contains bitumen, potassium and many kinds of acid, making it unpleasant to the taste. No fish can live in it.

234.--SEA OF GALILEE,

This beautiful sea is in the northern part of the Holy Land, and is 13 miles long, 6 miles wide, and 600 feet below the Mediterranean. Ruins of the cities of Capernaum and Chorazin are found on its shores. Here the Saviour made his home, and 22 out of the 35 miracles which he wrought were performed upon or near this sea.

THE RIVER JORDAN,--g.

The River Jordan runs almost the entire length of the Holy Land, and is called the Descender. It is 1,700 feet above the Mediterranean Sea at its source, and at its mouth, where it empties into the Dead Sea, it is 1,300 feet below the Mediterranean—falling 3,000 feet in its course of 200 miles.

The exact extent of the Holy Land as given to Abraham in the original promise, and as more minutely defined in a subsequent renewal of the original charter (Num. xxiv: 1-12) is not easily determined at this distance of time, when localities of many places are lost. It is evident the Israelites did not actually possess the full extent of territory embraced in the original grant, and it is further evident that two different boundaries of the land are given in two different places. According to the above passage from Numbers, the length of the Promised Land, north and south, is about 180 miles, and its breadth, east and west, about 90 miles at the south end and about 40 miles at the northern limit. This variation is occasioned by the slope of the Mediterranean coast in a south-westerly direction.

In Genesis God said to Abraham, "Unto thy seed have I given this land, from the river of Egypt unto the great river, the river Euphrates."

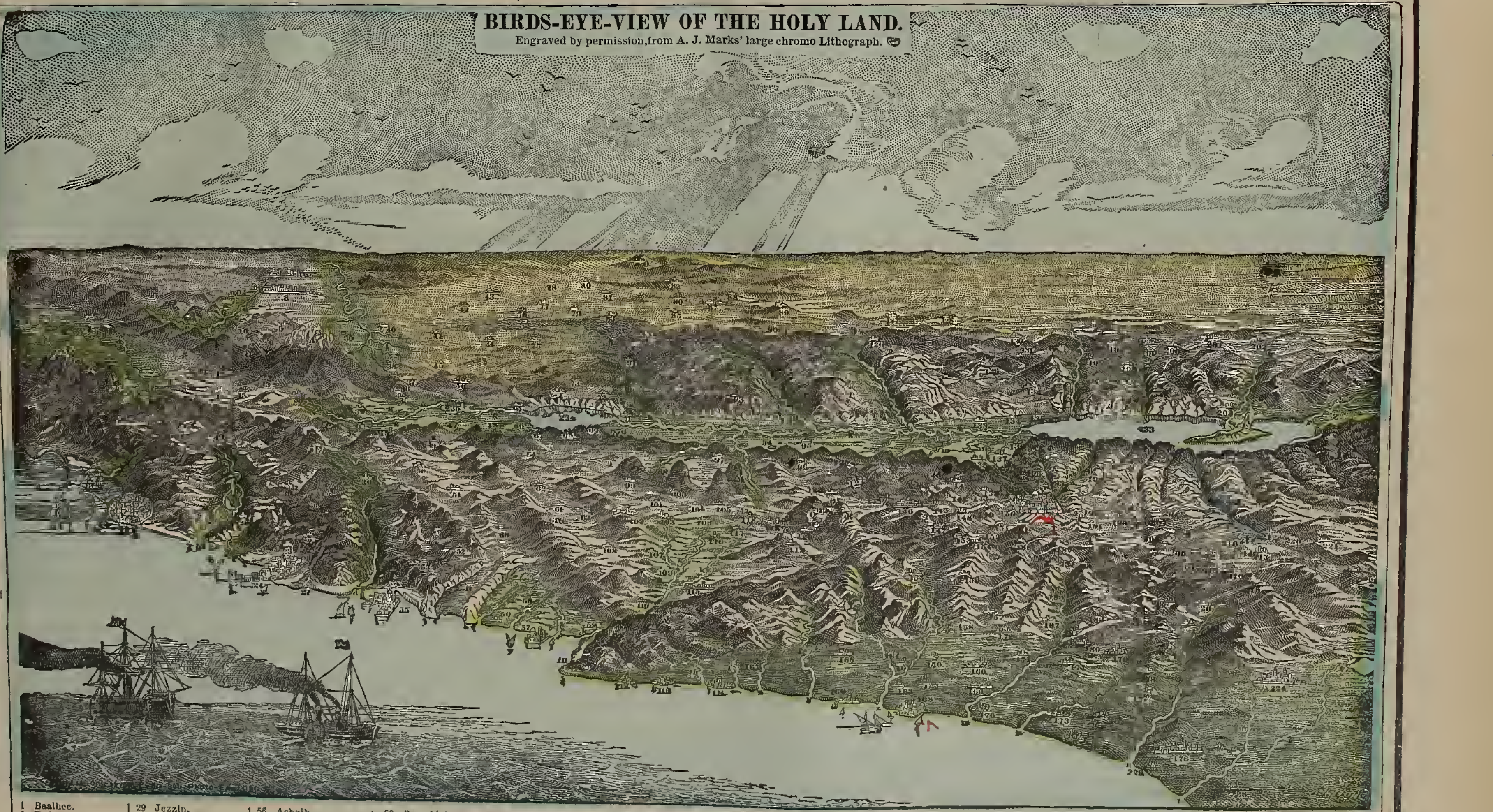
The smallness of Palestine often elicits surprise, when the number of people that inhabited it are considered and the magnitude of the events that have there transpired. It is about as large as the States of Connecticut and Rhode Island combined, and has an area of some 12,000 square miles.

The general surface of the country is mountainous, but these mountains often stand in majestic contrast with broad, flowing, fertile valleys, beautiful plains, verdant hills, or, perhaps, are spread out upon their sides and summits into rich table lands. There are many barren mountains and plains, and frightful desserts.

Moses said to the Israelites: "The land whither thou goest in to possess it, is a land of hills and valleys, and drinketh water of the rain of heaven; a land which the Lord thy God careth for."

BIRDS-EYE-VIEW OF THE HOLY LAND.

Engraved by permission, from A. J. Marks' large chromo Lithograph.



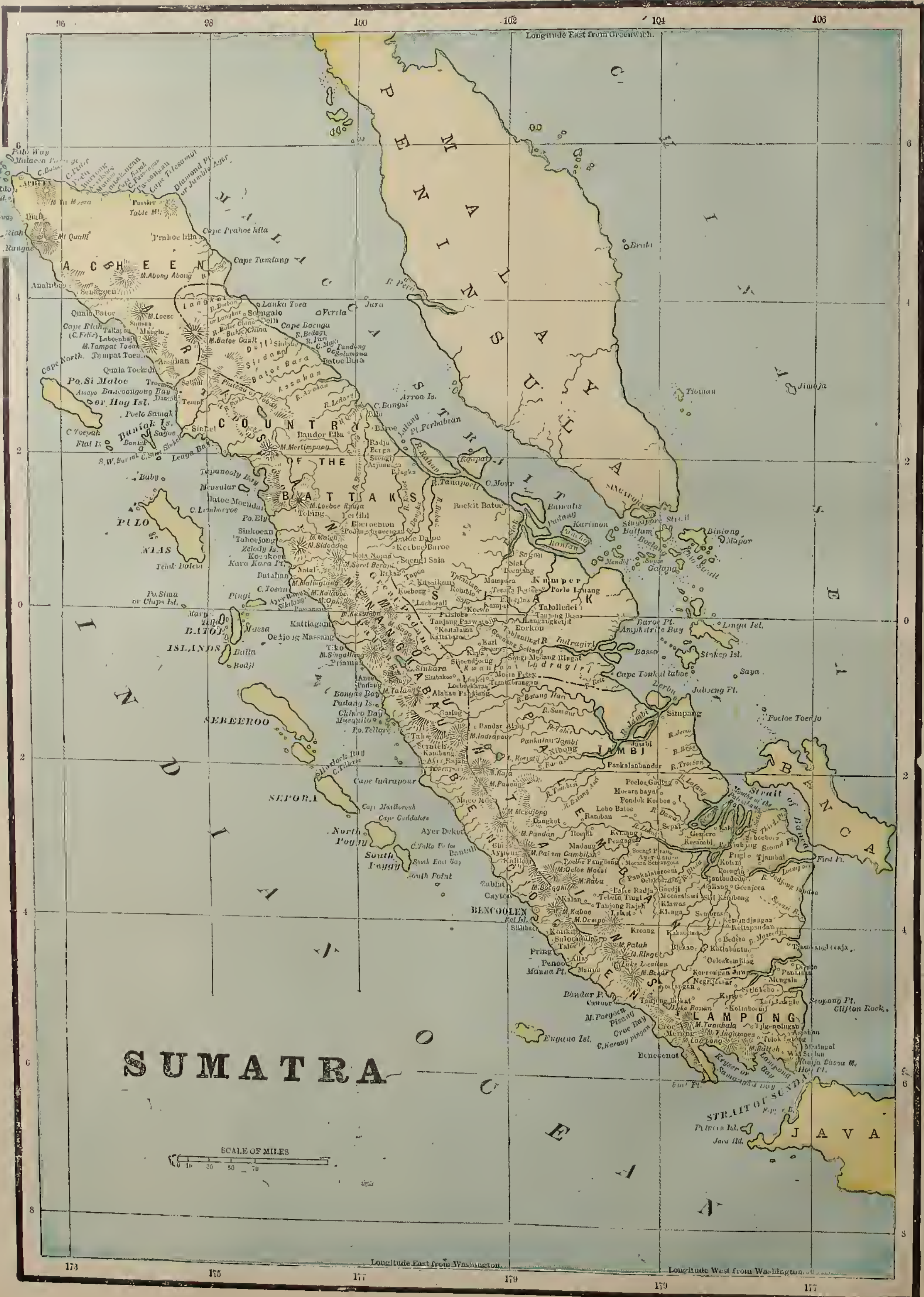
1	Baalbec.
2	Bednaya.
3	Zahleh.
4	Tomb of Seth.
5	Zehedany.
6	Abila.
7	Salahiyeh.
8	Damascus.
9	Daraya.
10	Tomb of Abel.
11	Janta.
12	Convent.
13	Mimas.
14	Jenin.
15	Kaukaba.
16	Tomb of Noah.
17	Mejdel.
18	Salima.
19	Deir el Kamir.
20	Zaduka.
21	Beirut.
22	Tomb of Jonah.
23	Stanhope Castle.
24	Sidon.
25	Mar Elyas.
26	Castle.
27	Sarepta.
28	Nebaliyeh.
29	Jezzin.
30	Castle Shukif.
31	Ijon.
32	Abel.
33	Hasbeiya.
34	Dan.
35	Banias.
36	Castle.
37	Lake Phiala.
38	Jubata.
39	Rimeh.
40	Kantana.
41	Kaukab.
42	Kesweh.
43	Hurjilleh.
44	Kuneiterah.
45	Nowaran.
46	Golan.
47	Kedesh.
48	Safed.
49	Castle Hunin.
49½	Giscala.
50	Castle Tibnin.
51	Iron.
52	Rameh.
53	Kanah.
54	Hiram's Tomb.
55	Tyre.
56	Achzib.
57	Accho.
58	Beth Emik.
59	Rehob.
60	Gabara.
61	Cana.
61½	Jotapata.
62	Hazor.
63	Seffurieh.
64	Hukkok.
65	Bethsaida.
66	Chorazin.
67	Capernaum.
68	Magdala.
69	Tiberias.
70	Kerak.
71	Hippos.
72	Gamala.
73	Apek.
74	Gerasa.
75	Khastin.
76	Nawa.
77.	Ederi.
78	Nejran.
79	Eshmiskin.
80	Shukkah.
81	Shuhba.
82	Kunawat.
83	Suweideh.
84	Derat.
85	Kamh.
86	Try.
87	Bozra.
88	Kureiyeh.
89	Beth Gamul.
90	Richab.
91	Abila.
92	Gadara.
93	Jabesh Gilead.
94	Abel Mehola.
95	Succoth.
96	Rehob.
97	Bethshean.
98	Endor.
99	Deburieh.
100	Nain.
101	Chesulloth.
102	Nazareth.
103	Japhia.
104	Shunem.
105	Jezrell.
106	Taanach.
107	Gabatha.
108	Bethlehem.
109	Jeffa.
110	Shefa Omar.
111	Haifa.
112	Athlit.
113	Dor.
114	Cæsarea.
115	Megiddo.
116	Hadad Rimmon
117	Dothan.
118	Jenin.
119	Samaria.
120	Shechem.
121	Joseph's Tomb.
122	Jacob's Well.
123	Shalim.
124	Akaben.
125	Archelais.
126	Penuel.
127	Gerasa.
128	Rabbath Ammon.
129	Heshbon.
130	Mashita.
131	Zophim.
132	Beth Peor.
133	Beth Nimra.
134	Beth Haran.
135	Beth Jesimoth.
136	Beth Hoglah.
137	Gilgal.
138	Jericho.
139	Anathoth.
140	Adummim.
141	Rock Rimmon.
142	Michmash.
143	Geba.
144	Ai.
145	Gibeah.
146	Gilgal.
147	Bethel.
147½	Shiloh.
148	Ramah.
149	Gibeah.
150	Jerusalem.
151	Gibeon.
152	Beeroth.
153	Ataroth.
154	Upper Bethhoron.
155	Timnath Serah.
156	Lower Bethhoron.
157	Ajalon.
158	Gimzo.
159	Lydda.
160	Ramleh.
161	Ono.
162	Beth Dagon.
163	Bene Berak.
164	Jehud.
165	Antipatris.
166	Apollonia.
167	Kerf Kanah.
168	Joppa.
169	Ekron.
170	Jabneel.
171	Gezer.
172	Emmaus.
173	Ashdod.
174	Gath.
175	Ashkelon.
176	Gaza.
177	Lachish.
178	Eglon.
179	Beit Jibrin.
180	Azeka.
181	Timnath.
182	Bethshemesh.
183	Shocho.
184	Nezib.
185	Gibeah.
186	Zanoah.
187	Zorah.
188	Kirjath Jearim.
189	Ramoth Zophim.
190	Bethlehem.
191	Rachel's Tomb.
192	Convent of Elyas.
193	Bethany.
194	Mar Saba.
195	Church of the Ascension.
196	Baal Meon.
197	Dibon.
198	Bezer.
199	Aroer.
200	Sihon.
201	Rabbath Moab.
202	Kerak.
203	Zoar.
204	Tekoa.
205	Halhul.
206	Bethzur.
207	Solomon's Pools.
208	Hebron.
209	Bethtappuah.
210	Ziph.
211	Carmel.
212	Maon.
213	Eshtemoa.
214	Jutta.
215	Dumah.
216	Adoriam.
217	Libna.
218	Debir.
219	Jattir.
220	Ain.
221	Arad.
222	Moladah.
223	Aroer
224	Beersheba.
225	Rimmon.
226	Anab.
227	St. John.
228	Gerar.
229	Majumas.
330	Maresah.
231	Rock Etam.
232	Masada.
233	Dead Sea.
234	Sea of Galilee.
235	Waters of Merom.

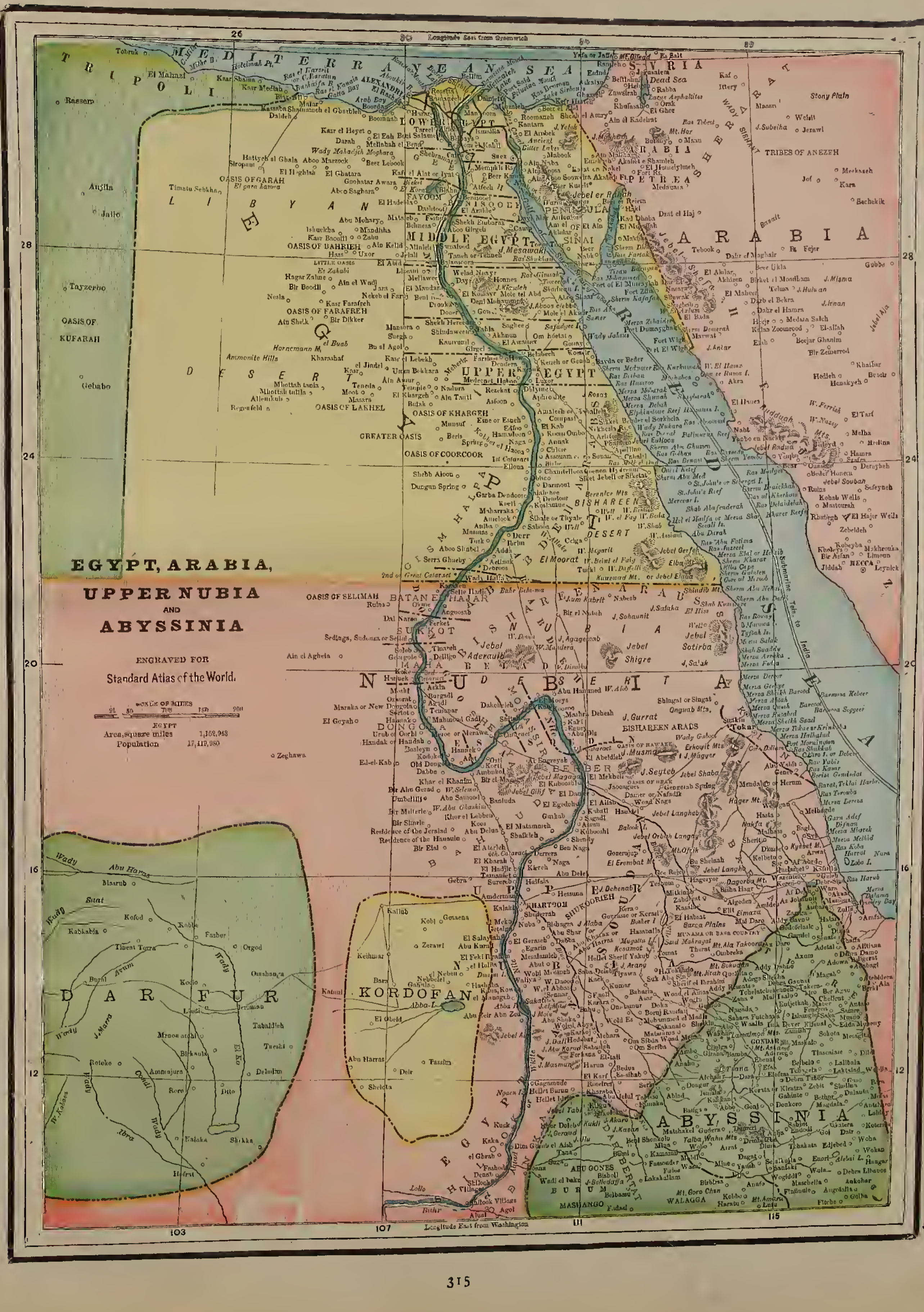
RIVERS.

a 1	Orentes.
a	Beirut.
b	Damur.
c	Owely.
d	Leontes.
e	Abana.
f	Pharpar.
g	Jordan.
h	Yarmuk.
i	Ajlun.
j	Jabbok.
k	Kishon.
l	Zerka.
l 1	Kana.
m	Aujeh.
n	Brook Cherith
o	Zerka Main.
p	Arnon.
q	Kerak.
r	Safieh.
s	Brook Kedron
t	Brook Bezor.
u	Simsim.
v	Safiyeh.
w	Rubin.
x	Aujeh.
y	Falik.
z	Zabura.
&	Belus.

MOUNTAINS.

A	Mt. Hermon. 6,050.
B	Mt. Sunin. 8,000
C	Mt. Kneseh. 7.500
D	Anti Lebanon. 4,000
E	Lebanon Mountains
F	Mt. Jarmuk. 4,000
G	Zabud, 4,000
H	White Promontory.
I	Mts. of Samaria. 2,50
J	Mt. Carmel. 1,800
K	Mt. Tabor. 2,000
L	Little Hermon. 1,800
M	Mt. Gilboa. 2,000
N	Jebl el Aswad.
O	Hauran Mount's. 6,50
P	Mt. Ajlun 3,500
Q	Mt. Ebal. 2,700
R	Mt. Gerizim. 2,650
S	Mt. Hazor. 3,400
T	Mt. Sinjil. 2,500
U	Mt. Mizpah. 2,800
V	Mt. Olives. 2,650
W	Mt. Pisgah. 2,800
X	Frank Mountain. 3,500
Y	Mt. Gilead. 3,500
Z	Salt Mountain. 3,000


SUMATRA
SCALE OF MILES
Longitude East from Greenwich.
Longitude East from Washington.
Longitude West from Washington.
96
98
100
102
104
106
173
175
177
179
179
177
MALAY PENINSULA
CHINA SEA
MALACCA STRAIT
INDIAN OCEAN
ACHEEN
COUNTRY OF THE BATTAKS
MENANGKABAU
PALEMBANG
LAMPONG
BENCOOLEN
JAMBI
Kumper
BANCA
JAVA
STRAIT OF SUNDA
Strait of Banca
PULO NIAS
BATOE ISLANDS
SEBEEROO
SEPORA
North Poggy
South Poggy
Engano Isl.
Po. Si Maloe
or Hog Isl.
Banjak Is.
Lingu Isl.
Singkep Isl.
Indragiri
Padang
Bencoolen
Diamond Pt.
Cape Tamiang
Cape Indrapour
Mana Pt.
Flat Pt.
Clifton Rock
Java Hd.
Princes Isl.
Singapore Strait
Battam
Bintang
Tioman
Jimaja
Aroa Is.


Longitude East from Greenwich
Longitude East from Washington
26
30
34
38
28
24
20
16
12
103
107
111
115
MEDITERRANEAN SEA
TRIPOLI
LIBYAN DESERT
LOWER EGYPT
MIDDLE EGYPT
UPPER EGYPT
ALEXANDRIA
Cairo
Suez
Port Said
PENINSULA OF SINAI
SYRIA
Jerusalem
Dead Sea
ARABIA PETRAEA
ARABIA
TRIBES OF ANEZEH
Stony Plain
RED SEA
Submarine Telegraph to India
Mecca
Jiddah
OASIS OF GARAH
OASIS OF BAHRIEH
OASIS OF FARAFREH
OASIS OF KUFARAH
OASIS OF DAKHEL
OASIS OF KHARGEH
GREATER OASIS
OASIS OF COORCOOR
OASIS OF SELIMAH
Luxor
Assouan
1st Cataract
2nd or Great Cataract
Wady Halfa
BISHAREEN DESERT
BATAN EL HAJAR
SUKKOT
DONGOLA
NUBIAN DESERT
NUBIA
BISHAREEN ARABS
Suakin
Tokar
Berber
Shendy
Khartoom
UPPER NUBIA
KORDOFAN
El Obeid
DAR FUR
Massawa
ABYSSINIA
Gondar
Axum
Annesley Bay
Sennar
ABU GONES
WALAGGA
BURUM
MASHANGO

EGYPT, ARABIA,

UPPER NUBIA

AND

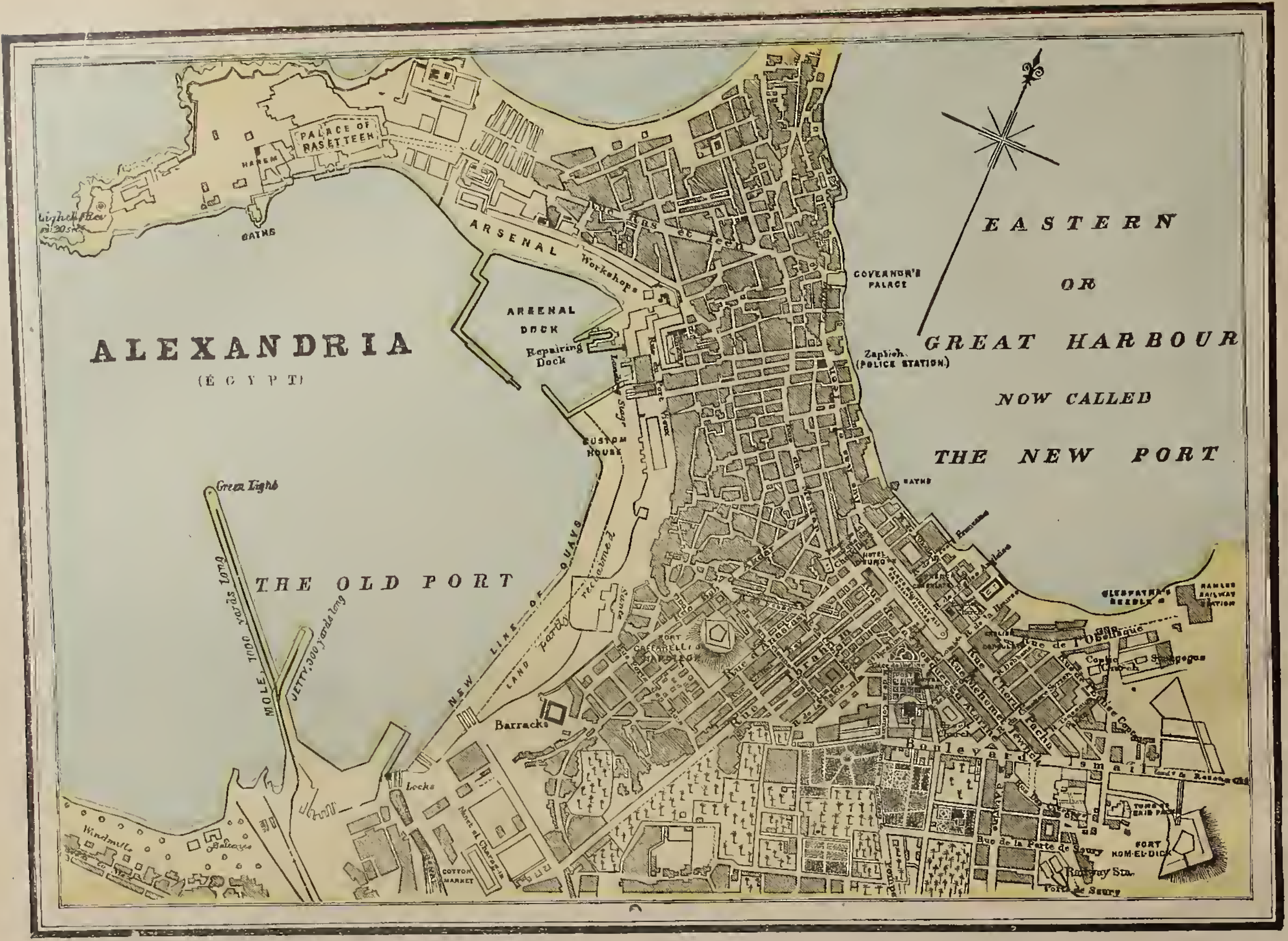
ABYSSINIA

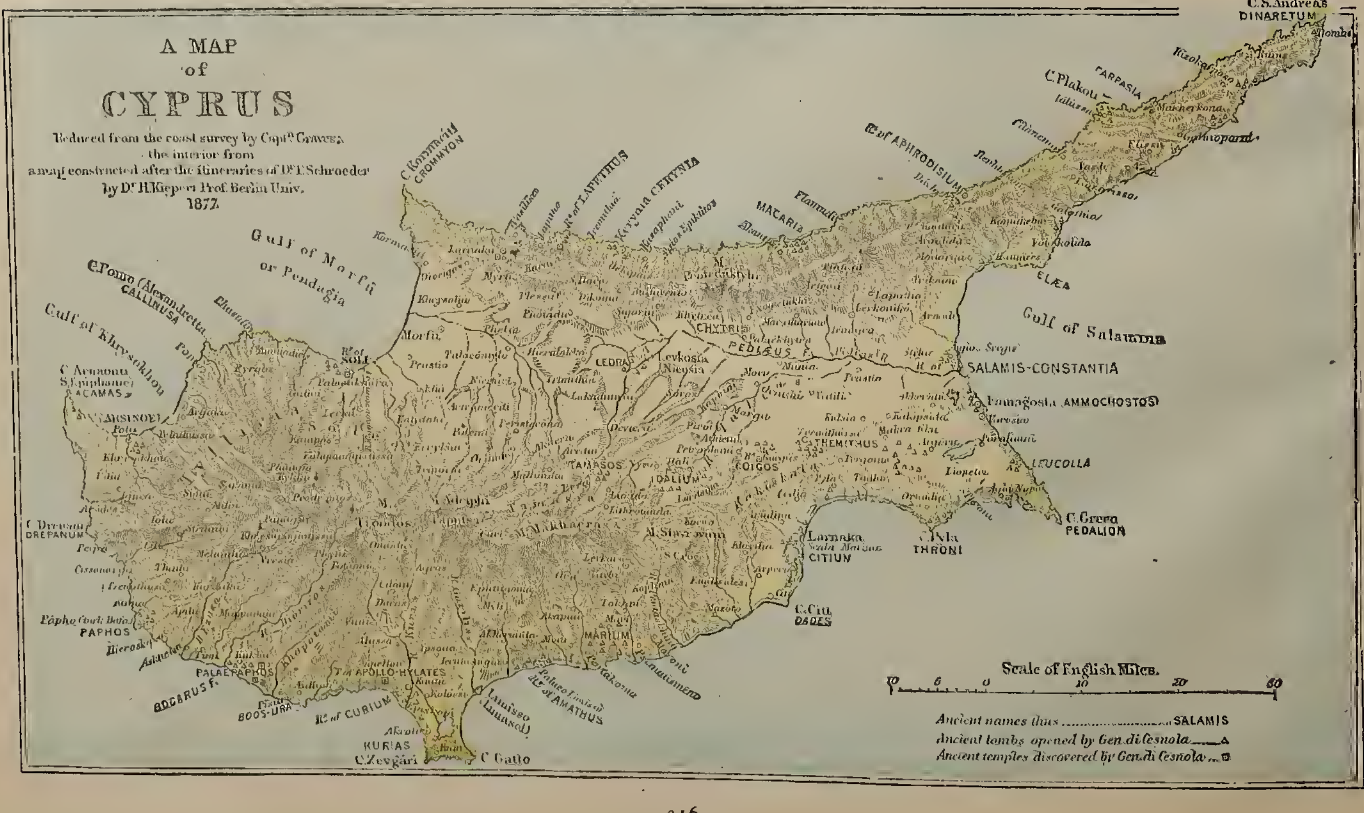
ENGRAVED FOR

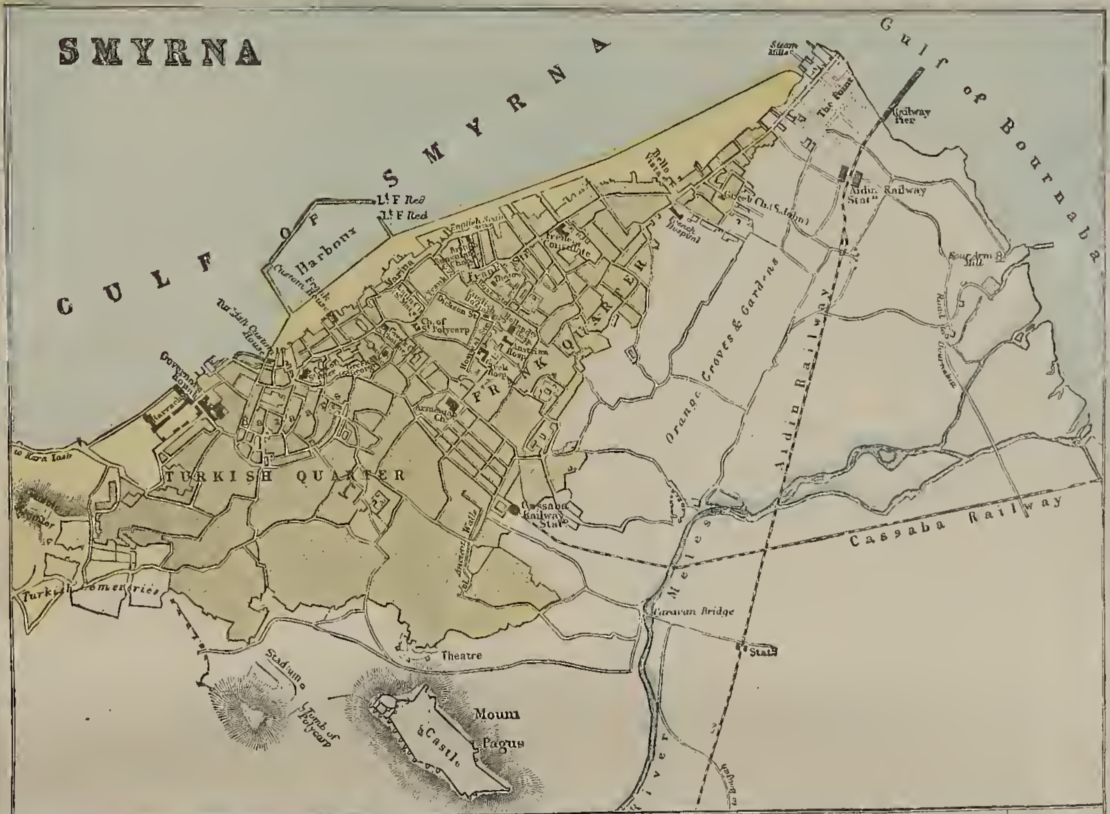
Standard Atlas of the World.

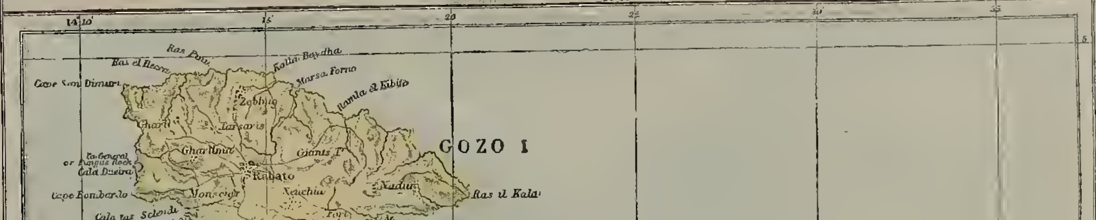
SCALE OF MILES

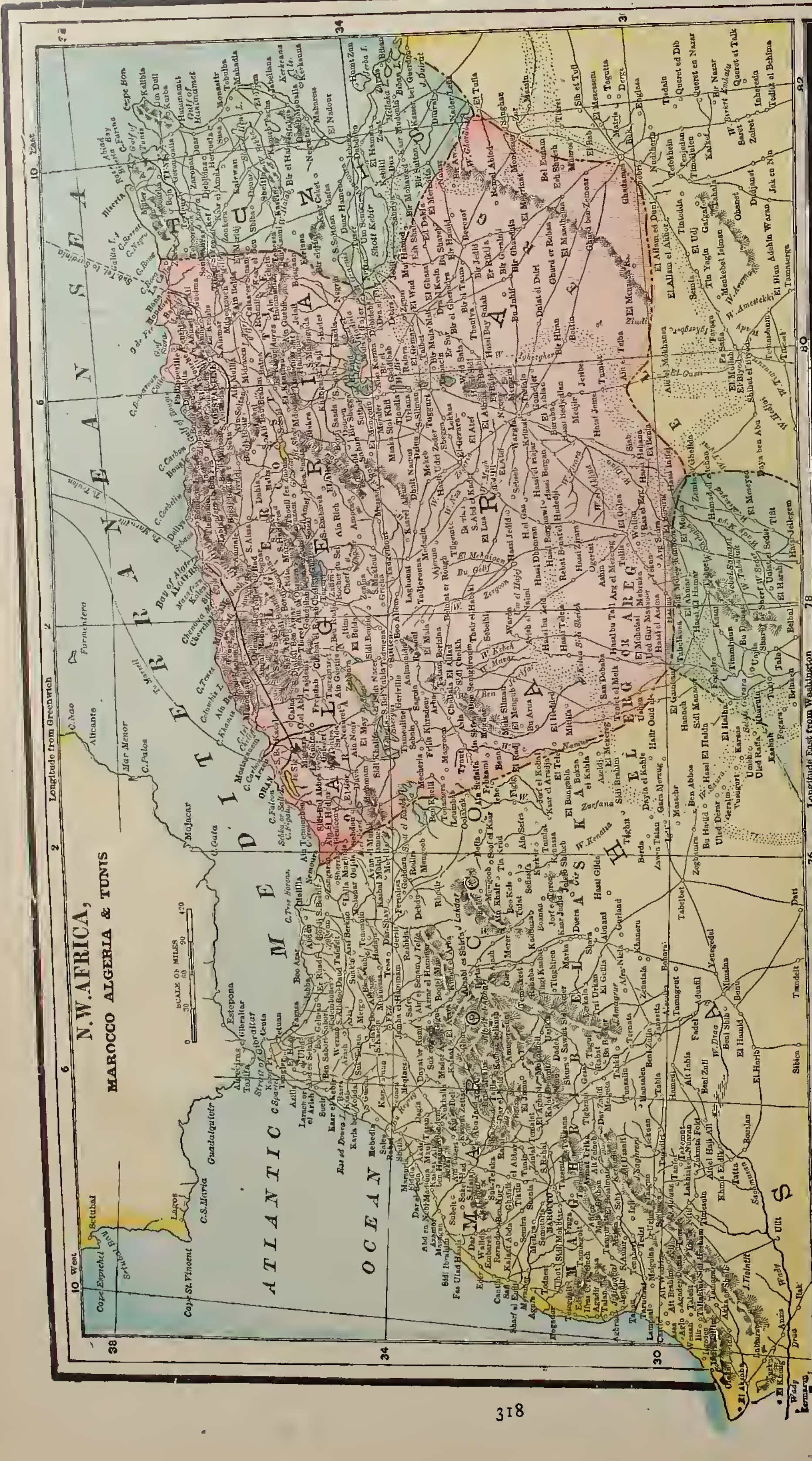
EGYPT	
Area, square miles	1,158,948
Population	17,112,980


ALEXANDRIA
(EGYPT)
PALACE OF RAS-ET-TEEN
HAREM
BATHS
Light House
ARSENAL
Workshops
ARSENAL DOCK
Repairing Dock
CUSTOM HOUSE
GOVERNOR'S PALACE
Zaptieh (POLICE STATION)
EASTERN OR GREAT HARBOUR NOW CALLED THE NEW PORT
BATHS
Green Light
THE OLD PORT
MOLE 7000 yards long
JETTY 300 yards long
NEW LINE OF QUAYS
LAND partly reclaimed
Barracks
Locks
Windmills
COTTON MARKET
HOTEL
CLEOPATRA'S NEEDLES
RAMLEH RAILWAY STATION
Rue Franque
Coptic Church
Synagogue
Boulevard Ismail
FORT KOM-EL-DICK
Rue de la Porte de Sesury
Railway Sta.
Porte de Sesury


A MAP
of
CYPRUS
Reduced from the coast survey by Capt. Graves,
the interior from
a map constructed after the itineraries of Dr. T. Schroeder
by Dr. H. Kiepert Prof. Berlin Univ.
1877
Gulf of Morfu or Pendagia
C. Pomo (Alexandretta) CALLINUSA
Gulf of Khrysokhou
C. Arnauti S. Epiphanio ACAMAS
ARSINOE
C. Drepano DREPANUM
Papho Paphos
PAPHOS
PALAEPAPHOS
BOCARUS F.
BOOS-URA
R. of CURIUM
KURIAS
C. Zevgari
C. Gatto
Temple of APOLLO HYLATES
R. of AMATHUS
Limasso (Limassol)
MARIUM
TAMASOS
IDALIUM
LEDRA
Levkosia Nicosia
CHYTRI
PEDIAEUS F.
GOLGOS
Troodos
M. Makhaera
M. Stavrovuni
Larnaka
CITIUM
C. Citi
DADES
C. Pyla
THRONI
C. Greco
PEDALION
LEUCOLLA
Famagosta AMMOCHOSTOS
SALAMIS-CONSTANTIA
Gulf of Salamis
ELAEA
MACARIA
R. of APHRODISIUM
R. of LAPETHUS
Kyrenia CERYNIA
C. Kormakiti CROMMYON
Morfu
R. of SOLI
C. Plakoti
CARPASIA
C. S. Andreas
DINARETUM
Scale of English Miles.
0 5 10 20 60
Ancient names thus .... SALAMIS
Ancient tombs opened by Gen. di Cesnola ...... △
Ancient temples discovered by Gen. di Cesnola ... ▫

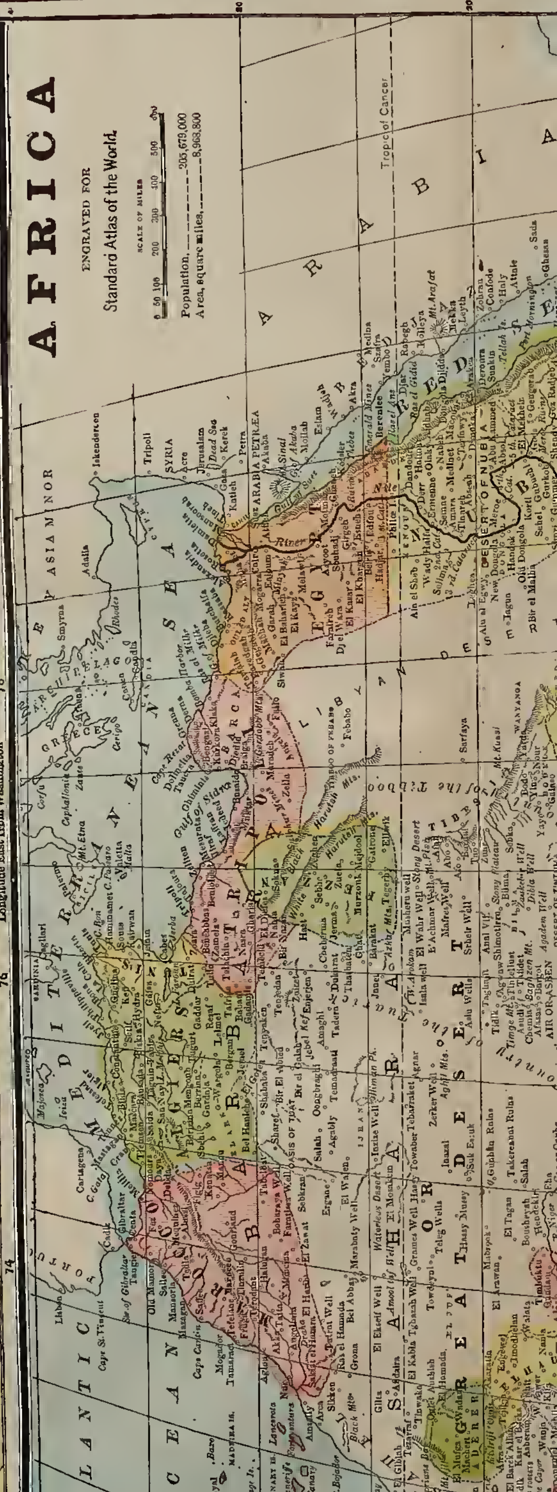

SMYRNA
GULF OF SMYRNA
Gulf of Bournaba
Harbour
Lt. F Red
Lt. F Red
Steam Mills
Railway Pier
Aidin Railway Stat.n
Greek Ch. (St. John)
French Hospital
French Consulate
Frank Street
Ch. of St. Polycarp
Armenian Ch.
FRANK QUARTER
TURKISH QUARTER
Custom House
Government House
Barracks
to Kara Tash
Turkish Cemeteries
Cassaba Railway Stat.n
Cassaba Railway
Aidin Railway
Orange Groves & Gardens
River Meles
Caravan Bridge
Stat.n
Theatre
Stadium
Tomb of Polycarp
Castle
Moum Pagus


THE MALTESE ISLANDS
English Miles
GOZO I
Comino I
MALTA I
Ras el Hobz
Ras Pom
Cape San Dimitri
Marsa Forno
Zebbug
Gharb
Gharbina
Rabato
Nadur
Ras il Kala
Cape Bombardo
Monscior
Sannat
Fort Chambray
Migiaro
Comunetto
Cala tal Michel
Lahrash Pt
Ras Lahrash
Marfa Pt
Torre Rossa
Melliha Bay
Melliha
St Paul Bay
Salina Bay
Madalena Bay
St Georges Bay
St Julian Bay
St Elmo Pt
Valletta
Ricasoli Pt
Ghain Tuffiha
Torre Ghayna
Benjemma Mts
Nadur
Rabato
Citta Vecchia
Dingli
Musta
Lia
Attard
Birchircara
Floriana
Zebbug
Siggiewi
Curmi
Casal Paula
Luca
Zabbar
Tarxien
Zeitun
Gudia
Micabba
Crendi
Zurrico
Bubakra
Marsa Scala
St Thomas Bay
Marsa Scirocco
Delamara Pt
Benhisa Pt
Hagira Seuda
Ras el Hamrun
Filfola I
Longitude East
14°10'
15'
20'
25'
30'
35'
36°
55'
50'



N.W. AFRICA,

MAROCCO ALGERIA & TUNIS



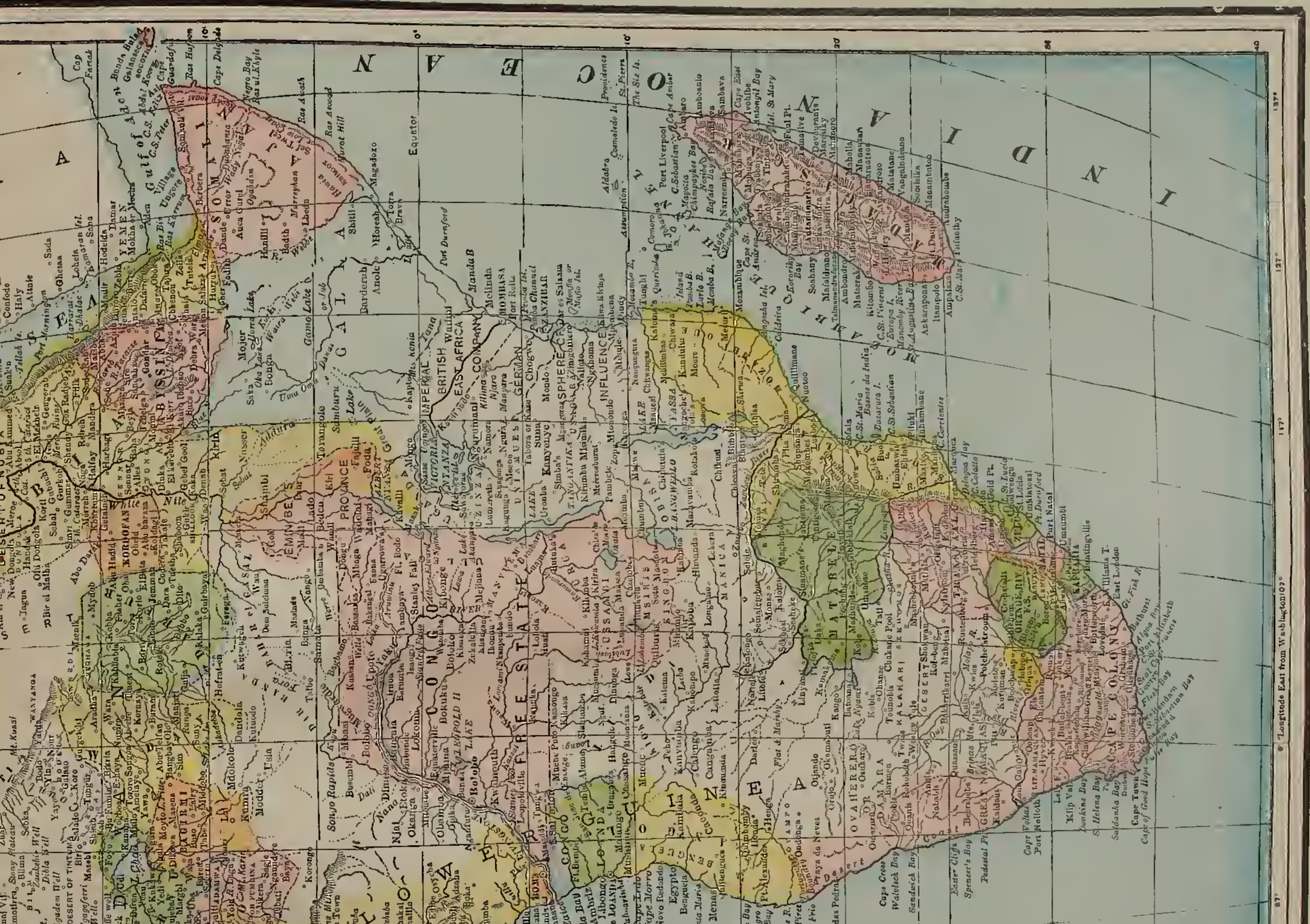
AFRICA

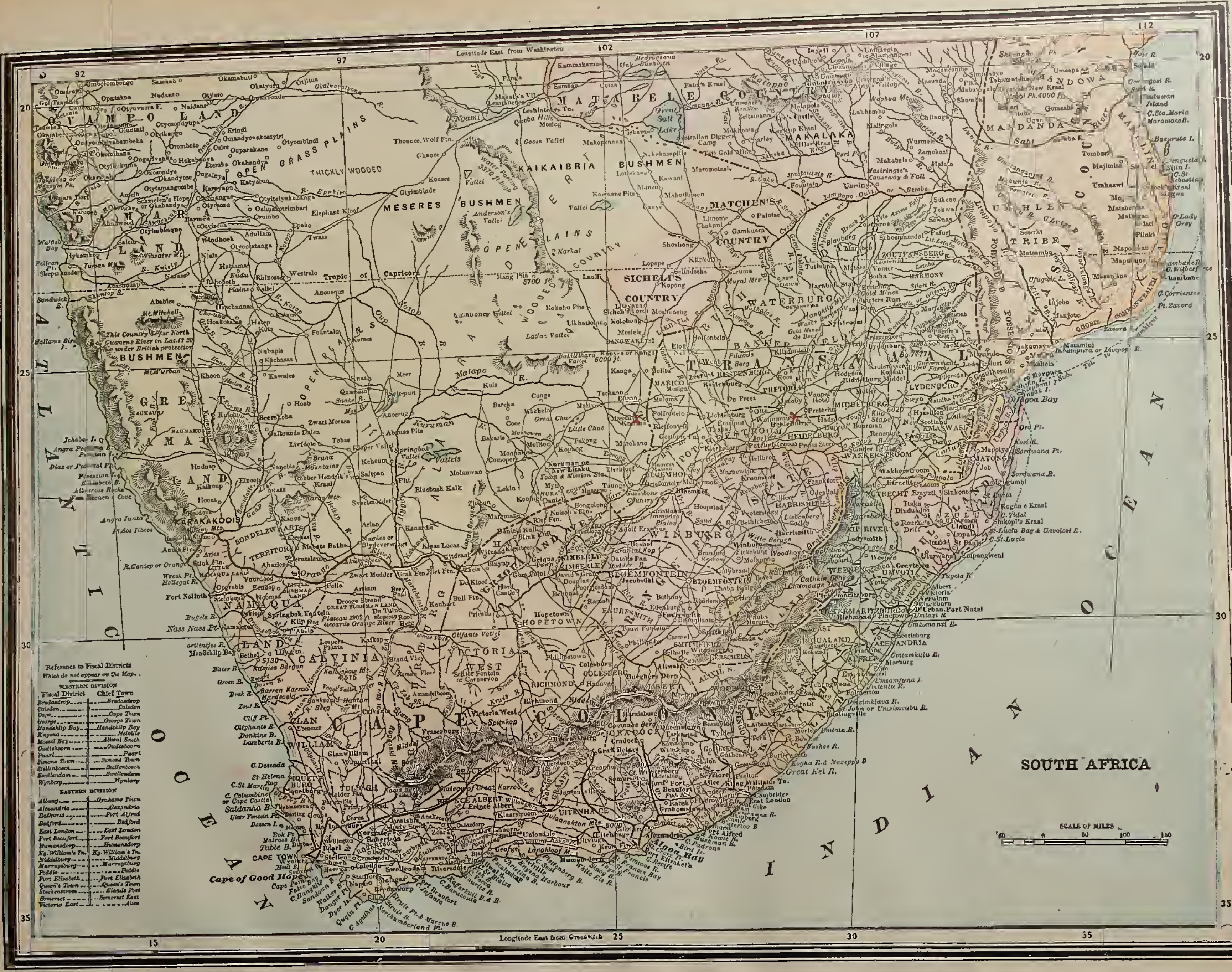
ENGRAVED FOR

Standard Atlas of the World.

Population..........203,679,000

Area, square miles..........8,968,800


SOUTH ATLANTIC OCEAN
INDIAN OCEAN
GULF OF GUINEA
Bight of Benin
Bight of Biafra
Equator
Tropic of Capricorn
CONGO FREE STATE
BRITISH EAST AFRICA
GERMAN SPHERE OF INFLUENCE
ABYSSINIA
SOMALI
GALLA
CAPE COLONY
MADAGASCAR
Gulf of Aden
Gold Coast
Slave Coast
Ivory Coast
Cape Town
St. Helena
Ascension I.
Longitude East from Washington


SOUTH AFRICA
SCALE OF MILES
0
50
100
150
Longitude East from Washington
Longitude East from Greenwich
92
97
102
107
112
15
20
25
30
35
ATLANTIC OCEAN
INDIAN OCEAN
OVAMPOLAND
DAMARA LAND
GREAT NAMAQUALAND
LITTLE NAMAQUALAND
BUSHMEN
KAIKAIBRIA
MESERES
OPEN GRASS PLAINS
THICKLY WOODED
OPEN PLAINS
KALAHARI DESERT
MATABELE COUNTRY
MAKALAKA
MATCHEN'S COUNTRY
SICHELI'S COUNTRY
TRANSVAAL
ORANGE FREE STATE
GRIQUALAND WEST
CAPE COLONY
NATAL
ZULU LAND
PORTUGUESE POSSESSIONS
UMZILA'S KINGDOM
MANDANDA
TRIBE
Tropic of Capricorn
Walfish Bay
Cape Town
Table B.
Cape of Good Hope
Algoa Bay
Port Elizabeth
East London
Kimberley
Bloemfontein
Pretoria
Heidelberg
Pietermaritzburg
D'Urban, Port Natal
Delagoa Bay
Lydenburg
Middelburg
Potchefstroom
Harrismith
Hopetown
Grahams Town
Port Nolloth
Orange R.
Limpopo R.
Vaal R.
Molopo R.

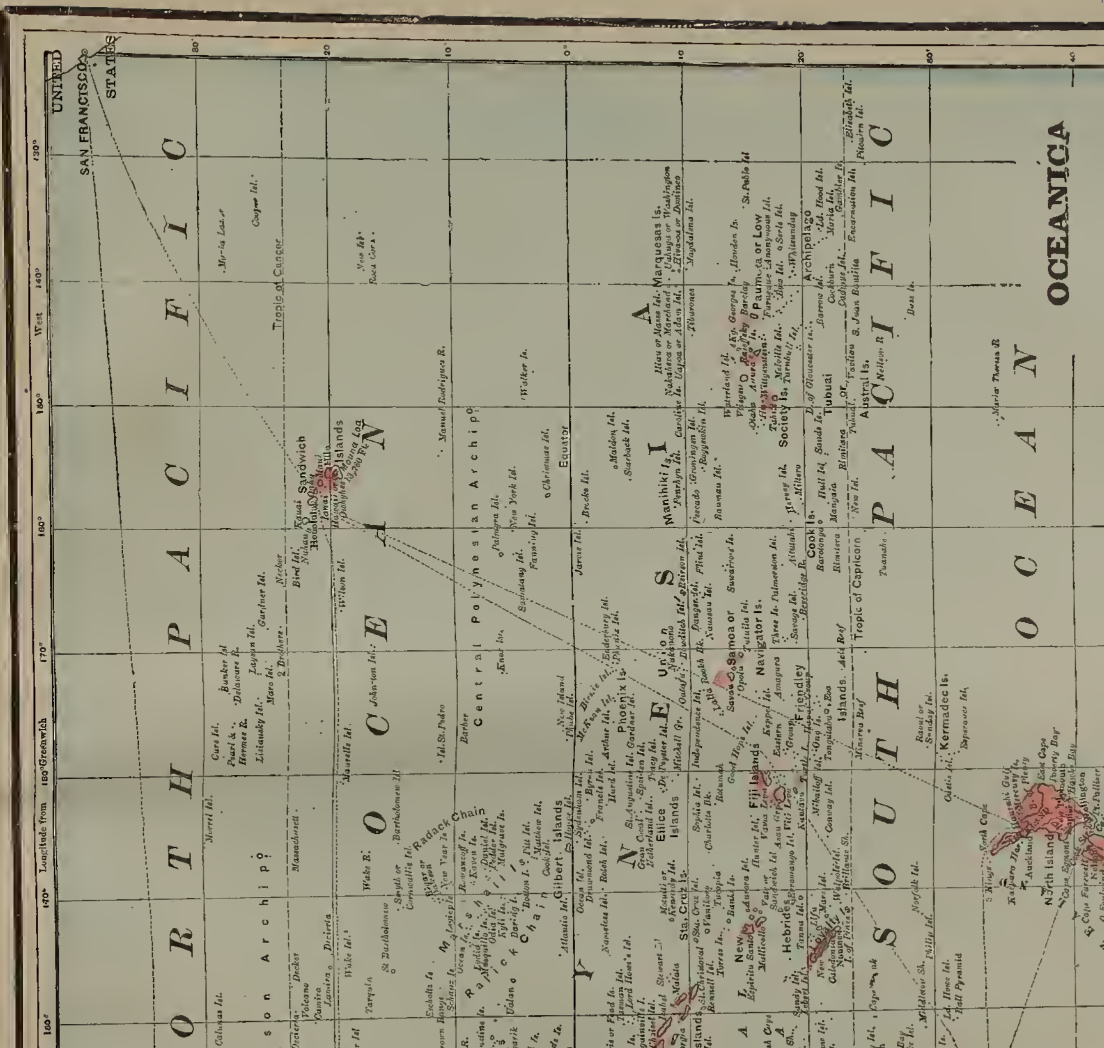
References to Fiscal Districts
Which do not appear on the Map.

WESTERN DIVISION

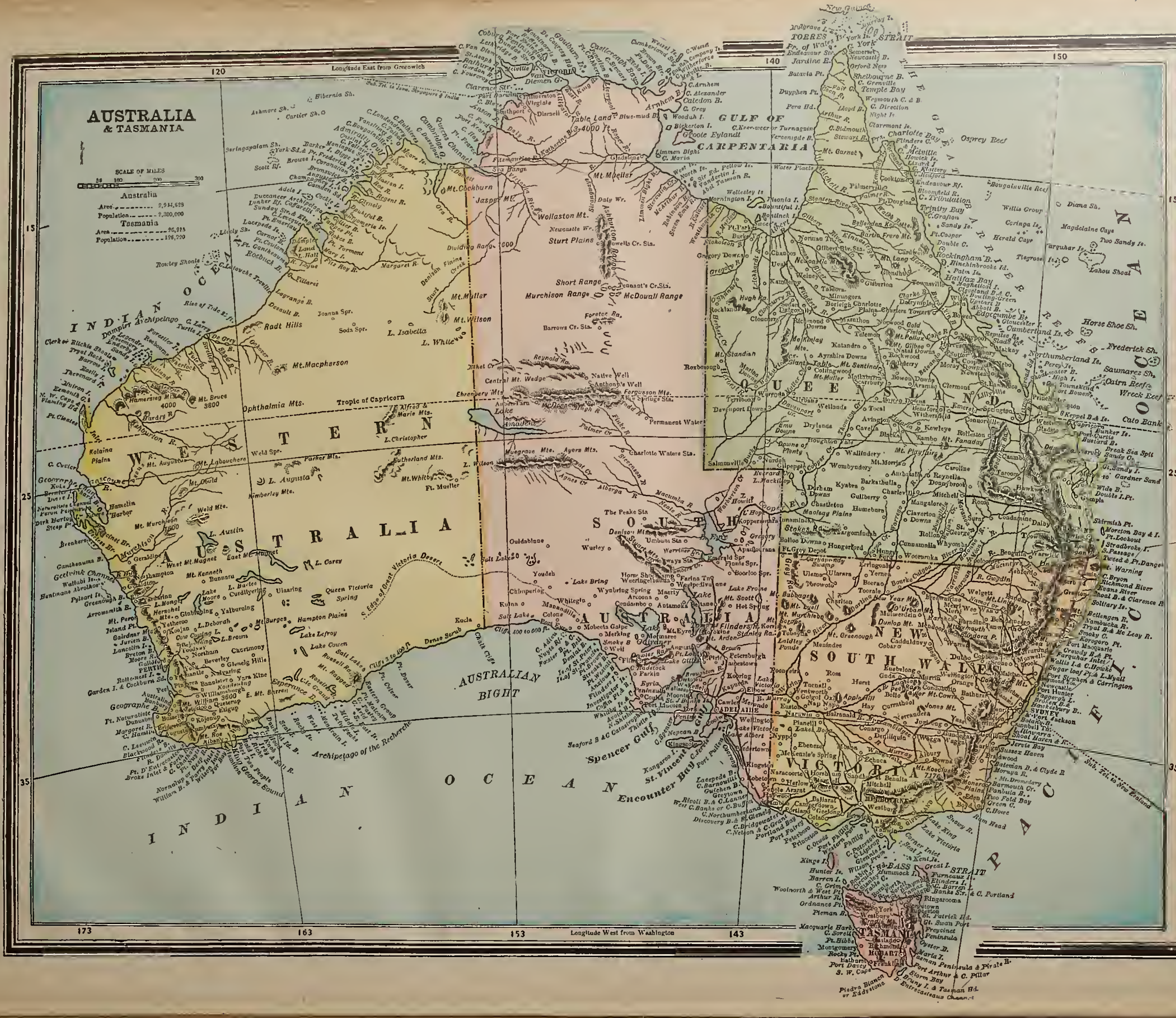
Fiscal District	Chief Town
Bredasdorp	Bredasdorp
Caledon	Caledon
Cape	Cape Town
George	George Town
Hondeklip Bay	Hondeklip Bay
Kayana	Malolile
Mossel Bay	Aliwal South
Oudtshoorn	Oudtshoorn
Paarl	Paarl
Simons Town	Simons Town
Stellenbosch	Stellenbosch
Swellendam	Swellendam
Wynberg	Wynberg

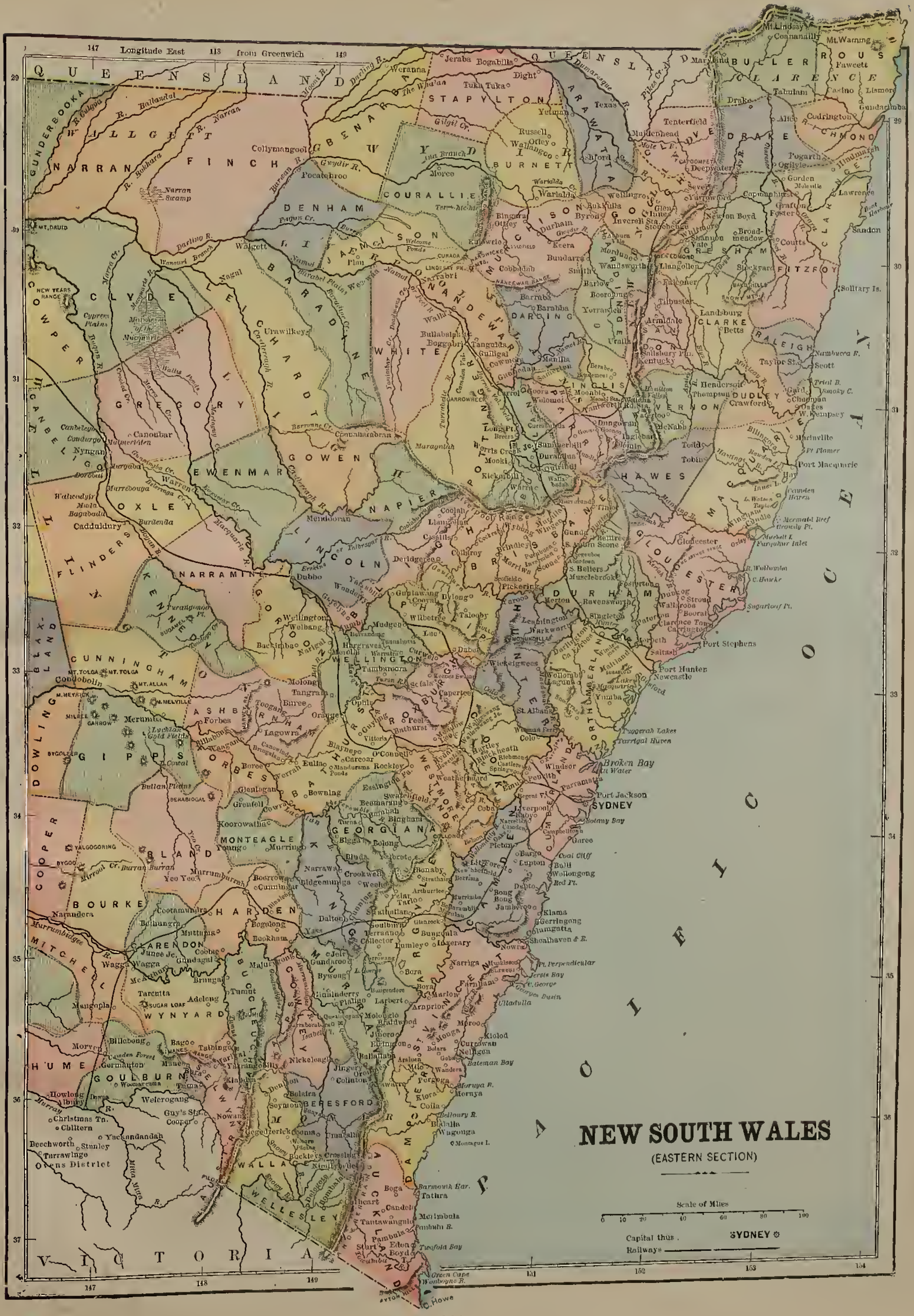
EASTERN DIVISION

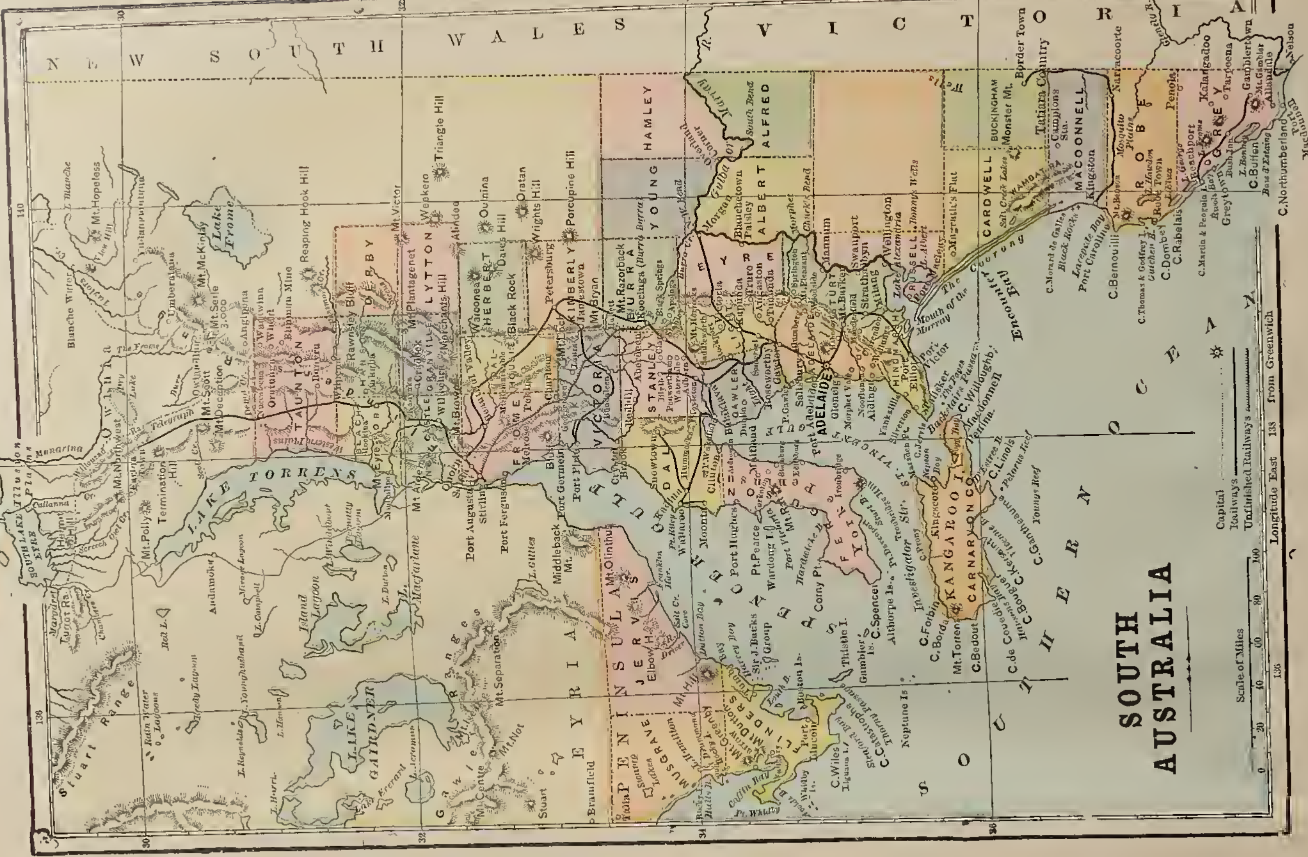
Fiscal District	Chief Town
Albany	Grahams Town
Alexandria	Alexandria
Bathurst	Port Alfred
Bedford	Bedford
East London	East London
Fort Beaufort	Fort Beaufort
Humansdorp	Humansdorp
Kg. William's Tn.	Kg. William's Tn.
Middelburg	Middelburg
Murraysburg	Murraysburg
Peddie	Peddie
Port Elizabeth	Port Elizabeth
Queen's Town	Queen's Town
Stockenstrom	Elands Post
Somerset	Somerset East
Victoria East	Alice


OCEANICA
NORTH PACIFIC OCEAN
SOUTH PACIFIC OCEAN
Longitude from 180 Greenwich
Longitude West from 105 Washington
SAN FRANCISCO
UNITED STATES
JAPAN
Pekin
Canton
Hong Kong
YELLOW SEA
CHINA SEA
FORMOSA
Loo choo Is.
Bonin Is.
Arzobispo Is.
Volcano Is.
Anson Archipelago
Tropic of Cancer
PHILIPPINE ISLANDS
Manila
Mariana or Ladrone Is.
Pelew Islands
BORNEO
CELEBES
Java Sea
Banda Sea
SUNDA ISLANDS
ARAFURA SEA
PAPUA or NEW GUINEA
New Britannia
Solomon Islands
Radack Chain
Ralick Chain
Gilbert Islands
Ellice Islands
Central Polynesian Archipelago
Sandwich Islands
Equator
Phoenix Is.
Union Is.
Samoa or Navigator Is.
Fiji Islands
Friendly Islands
New Hebrides
New Caledonia
CORAL SEA
Sta. Cruz Is.
Marquesas Is.
Society Is.
Paumotu or Low Archipelago
Cook Is.
Tubuai
Austral Is.
Kermadec Is.
Tropic of Capricorn
NORTH AUSTRALIA
WESTERN AUSTRALIA
SOUTH AUSTRALIA
QUEENSLAND
NEW SOUTH WALES
VICTORIA
TASMANIA
NEW ZEALAND
North Island
South Island

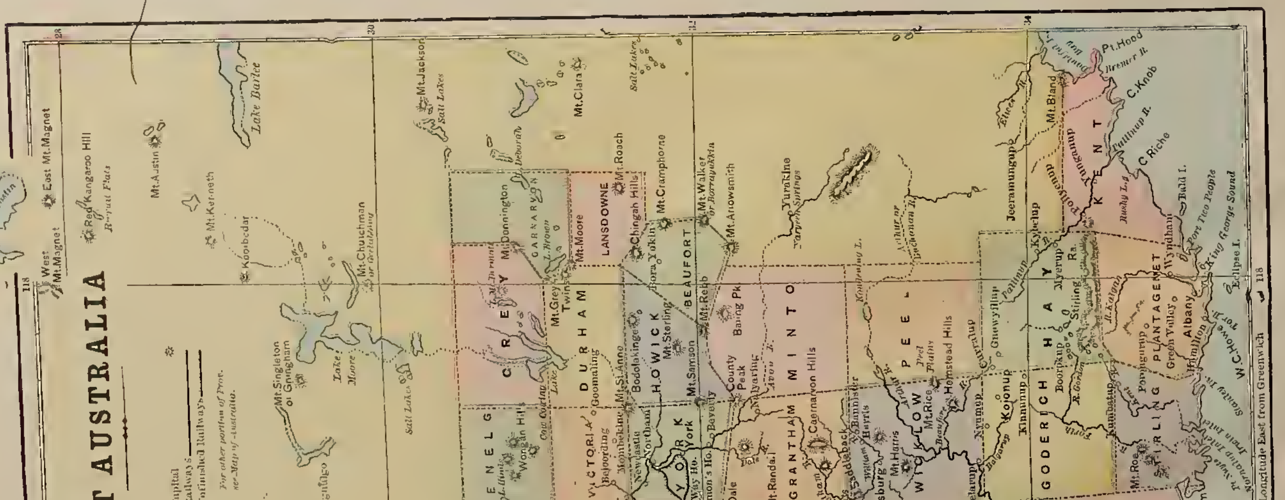
AUSTRALIA
& TASMANIA


SCALE OF MILES
50
100
200
300
Australia
Area 2,944,628
Population 3,300,000
Tasmania
Area 26,215
Population 196,220
Longitude East from Greenwich
Longitude West from Washington
Tropic of Capricorn
INDIAN OCEAN
PACIFIC OCEAN
WESTERN AUSTRALIA
SOUTH AUSTRALIA
QUEENSLAND
NEW SOUTH WALES
VICTORIA
TASMANIA
GULF OF CARPENTARIA
AUSTRALIAN BIGHT
BASS STRAIT
TORRES STRAIT
THE GREAT BARRIER REEF
Spencer Gulf
Encounter Bay

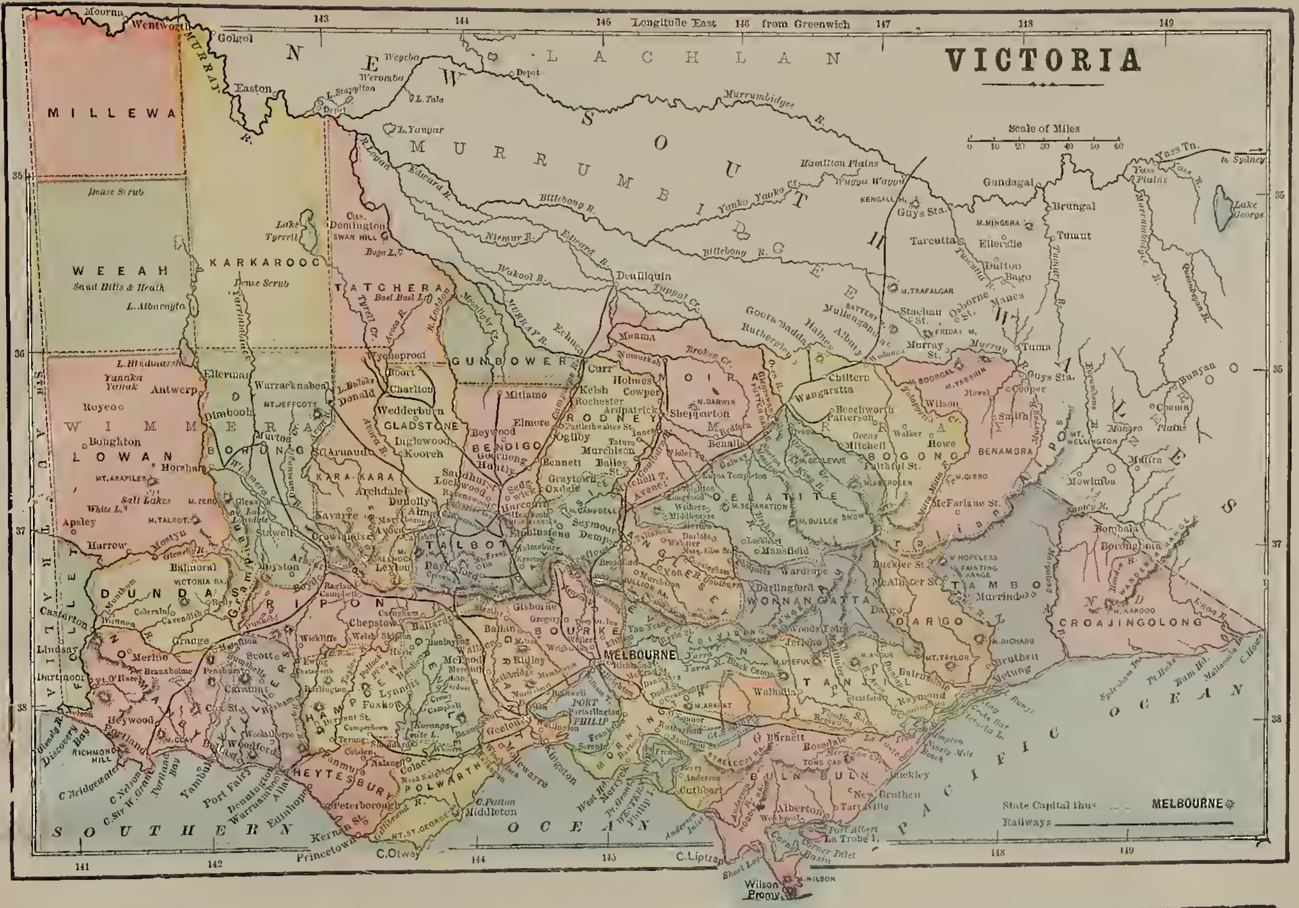

NEW SOUTH WALES
(EASTERN SECTION)
Scale of Miles
0 10 20 40 60 100
Capital thus SYDNEY
Railways
Longitude East from Greenwich
147
148
149
151
152
153
154
29
30
31
32
33
34
35
36
37
QUEENSLAND
VICTORIA
PACIFIC OCEAN
SYDNEY
Port Jackson
Botany Bay
Broken Bay
Newcastle
Port Stephens
Port Macquarie
Solitary Is.
Bateman Bay
C. Howe
Twofold Bay
Jervis Bay
Montague I.
BULLER
ROUS
CLARENCE
DRAKE
RICHMOND
GOUGH
ARAWATTA
STAPYLTON
BENARBA
BURNETT
FINCH
NARRAN
WALLGETT
CLYDE
COWPER
GREGORY
LEICHHARDT
BARADINE
JAMISON
WHITE
DENHAM
COURALLIE
NANDEWAR
DARLING
HARDINGE
SANDON
GRESHAM
FITZROY
CLARKE
RALEIGH
INGLIS
VERNON
DUDLEY
MACQUARIE
HAWES
PARRY
BUCKLAND
POTTINGER
GOWEN
EWENMAR
NAPIER
LINCOLN
OXLEY
FLINDERS
KENNEDY
NARROMINE
GORDON
BLIGH
BRISBANE
DURHAM
GLOUCESTER
PHILLIP
HUNTER
NORTHUMBERLAND
WELLINGTON
CUNNINGHAM
ASHBURNHAM
BATHURST
ROXBURGH
COOK
WESTMORELAND
GEORGIANA
CAMDEN
CUMBERLAND
FORBES
MONTEAGLE
BLAND
GIPPS
DOWLING
BLAXLAND
COOPER
BOURKE
HARDEN
KING
ARGYLE
MURRAY
CAMDEN
ST. VINCENT
CLARENDON
MITCHELL
WYNYARD
BUCCLEUCH
COWLEY
BERESFORD
DAMPIER
HUME
GOULBURN
SELWYN
WALLACE
WELLESLEY
AUCKLAND

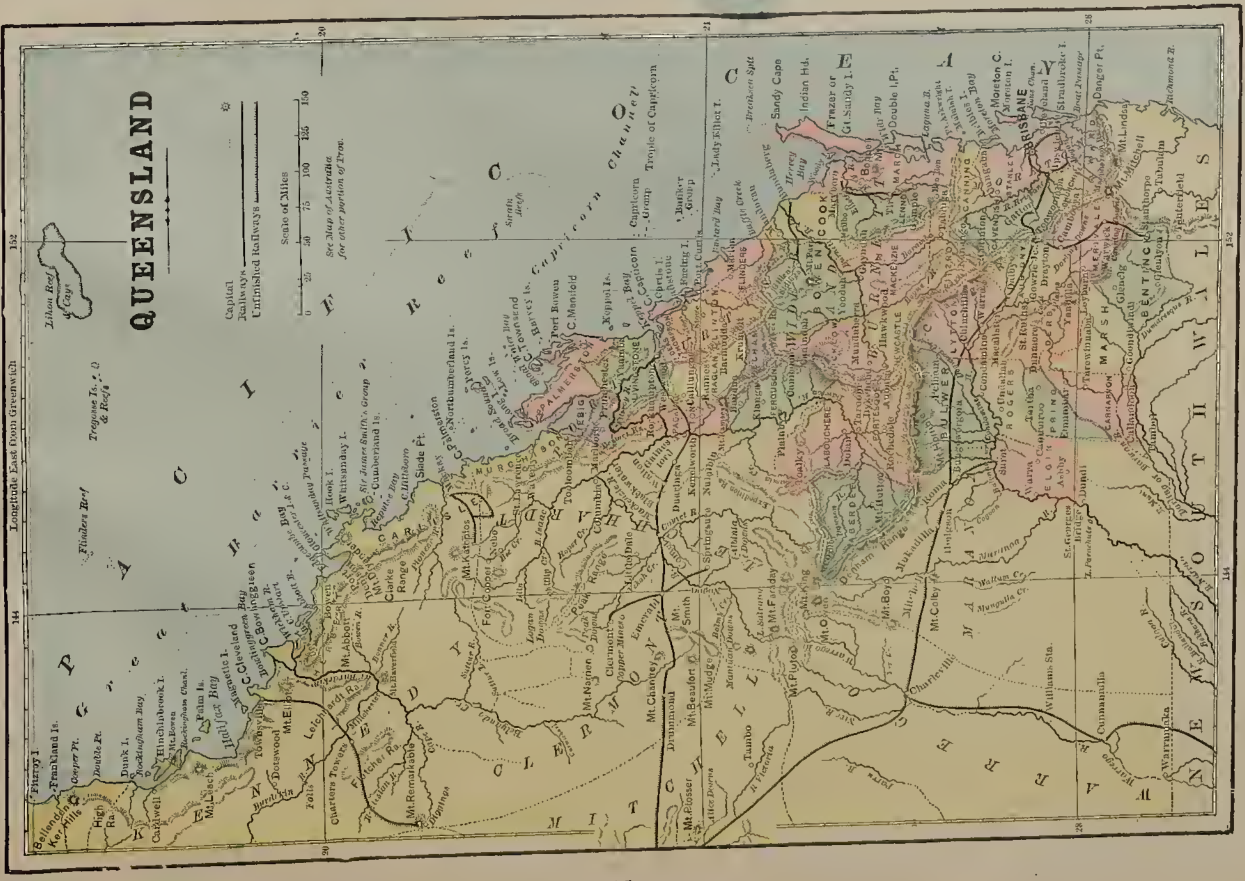


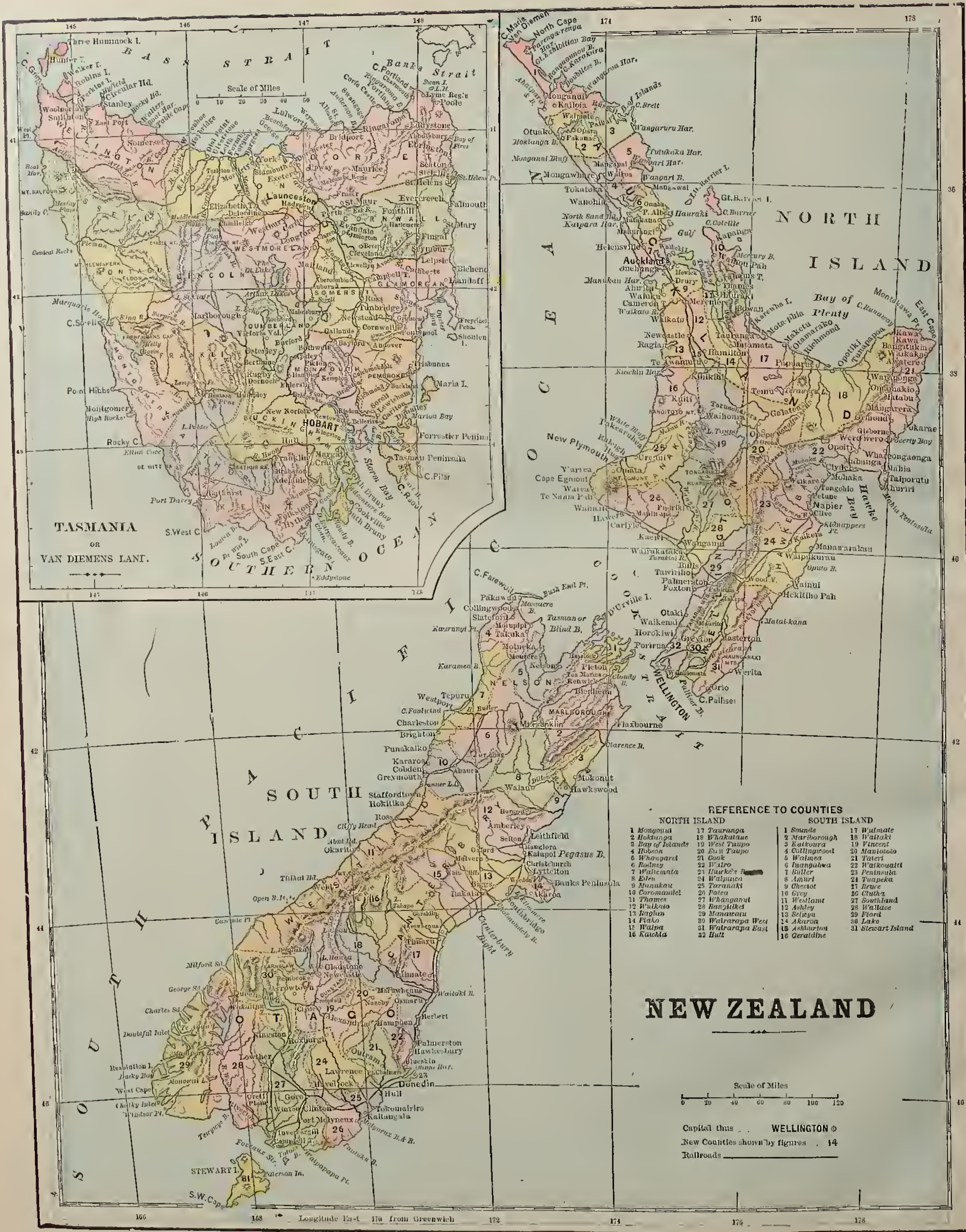
SOUTH AUSTRALIA
NEW SOUTH WALES
VICTORIA
SOUTHERN OCEAN
LAKE TORRENS
LAKE GAIRDNER
Lake Frome
EYRIA PENINSULA
ADELAIDE
KANGAROO I.
Spencer Gulf
St. Vincent's Gulf
Encounter Bay
Port Augusta
Port Lincoln
Capital
Railways
Unfinished Railways
Scale of Miles
Longitude East 138 from Greenwich



WEST AUSTRALIA
Capital
Railways
Unfinished Railways
For other portion of Prov. see Map of Australia.
INDIAN OCEAN
PERTH
Lake Moore
Lake Barlee
Geographe Bay
King George Sound
Albany
Fremantle
Bunbury
Scale of Miles
Longitude East from Greenwich


VICTORIA
Longitude East from Greenwich
Scale of Miles
State Capital thus MELBOURNE
Railways
MELBOURNE
PORT PHILIP
SOUTHERN OCEAN
PACIFIC OCEAN
NEW SOUTH WALES
LACHLAN
MURRUMBIDGEE
MILLEWA
WEEAH
KARKAROOC
TATCHERA
GUNBOWER
WIMMERA
LOWAN
BORUNG
KARA KARA
GLADSTONE
BENDIGO
RODNEY
MOIRA
DELATITE
BOGONG
BENAMBRA
TAMBO
DARGO
CROAJINGOLONG
TANJIL
WONNANGATTA
EVELYN
BOURKE
GRANT
MORNINGTON
BULN BULN
POLWARTH
HEYTESBURY
VILLIERS
RIPON
TALBOT
DUNDAS
FOLLETT
NORMANBY
HAMPDEN
GRENVILLE
Geelong
Ballarat
Sandhurst
Wilson Promy.
C. Otway


QUEENSLAND
Capital
Railways
Unfinished Railways
Scale of Miles
See Map of Australia for other portion of Prov.
Longitude East from Greenwich
BRISBANE
PACIFIC OCEAN
Great Barrier Reef
NEW SOUTH WALES
Tropic of Capricorn
Capricorn Channel
Rockhampton
Maryborough
Toowoomba
Townsville
Bowen
Mackay
Charleville
Warwick
Darling Downs
Moreton Bay
Hervey Bay
Sandy Cape
Flinders Reef
Whitsunday I.
Cumberland Is.
MITCHELL
WARREGO
MARANOA
LEICHHARDT
KENNEDY
Clermont
Burnett R.
Fitzroy R.


TASMANIA
OR
VAN DIEMENS LANT.
BASS STRAIT
SOUTHERN OCEAN
Scale of Miles
Launceston
HOBART
Three Hummock I.
Hunter I.
Stanley
Circular Hd.
Somerset
Elizabeth T.
Westbury
Longford
Perth
Evandale
Fingal
St. Helens
Swansea
Campbell T.
Ross
Oatlands
Bothwell
New Norfolk
Macquarie Har.
Port Davey
Maria I.
Tasman Peninsula
C. Pillar
South Cape
S.West C.
Point Hibbs
Rocky C.
Montgomery
Marlborough
DORSET
DEVON
CORNWALL
WESTMORELAND
GLAMORGAN
SOMERSET
CUMBERLAND
MONMOUTH
PEMBROKE
BUCKINGHAM
LINCOLN
MONTAGU
RUSSELL
FRANKLIN
KENT
MONTGOMERY
ARTHUR
NORTH ISLAND
SOUTH ISLAND
STEWART I.
SOUTH PACIFIC OCEAN
COOK STRAIT
North Cape
C. Maria Van Diemen
Bay of Islands
Hokianga
Kaipara Har.
Auckland
Hauraki Gulf
Great Barrier I.
Thames
Bay of Plenty
East Cape
Tauranga
Hamilton
Raglan
Kawhia Har.
Napier
Hawke Bay
Cape Egmont
New Plymouth
Wanganui
Palmerston
Foxton
Masterton
Greytown
Otaki
WELLINGTON
C. Palliser
C. Farewell
Nelson
Picton
Blenheim
MARLBOROUGH
NELSON
Westport
Charleston
Greymouth
Hokitika
Kaikoura
Cheviot
Christchurch
Lyttelton
Akaroa
Banks Peninsula
Pegasus B.
Canterbury Bight
Timaru
Oamaru
Waimate
Dunedin
Palmerston
Lawrence
Invercargill
Queenstown
Milford Sd.
Foveaux Str.
S.W. Cape
WESTLAND
CANTERBURY
OTAGO
Longitude East 170 from Greenwich

NEW ZEALAND

Scale of Miles

Capital thus . . WELLINGTON ⊙

New Counties shown by figures . 14

Railroads ———

REFERENCE TO COUNTIES

NORTH ISLAND		SOUTH ISLAND	
1 Mongonui	17 Tauranga	1 Sounds	17 Waimate
2 Hokianga	18 Whakatane	2 Marlborough	18 Waitaki
3 Bay of Islands	19 West Taupo	3 Kaikoura	19 Vincent
4 Hobson	20 East Taupo	4 Collingwood	20 Maniototo
5 Whangarei	21 Cook	5 Waimea	21 Taieri
6 Rodney	22 Wairoa	6 Inangahua	22 Waikouaiti
7 Waitemata	23 Hawke's B[illegible]	7 Buller	23 Peninsula
8 Eden	24 Waipawa	8 Amuri	24 Tuapeka
9 Manukau	25 Taranaki	9 Cheviot	25 Bruce
10 Coromandel	26 Patea	10 Grey	26 Clutha
11 Thames	27 Whanganui	11 Westland	27 Southland
12 Waikato	28 Rangitikei	12 Ashley	28 Wallace
13 Raglan	29 Manawatu	13 Selwyn	29 Fiord
14 Piako	30 Wairarapa West	14 Akaroa	30 Lake
15 Waipa	31 Wairarapa East	15 Ashburton	31 Stewart Island
16 Kawhia	32 Hutt	16 Geraldine	

SAMOAN ISLANDS, OR NAVIGATORS' ISLANDS.

A group in the South Pacific, about 420 miles Northeast of the Feejee Islands, between latitude 13 degrees, 27 minutes, and 14 degrees, 18 minutes South, and longitude 169 degrees, 28 minutes, and 172 degrees, 48 minutes West. They include thirteen islands, nine of which are inhabited, viz.: Manua, Olosinga, Ofu, Anuu, Tutuila, Upolu, Manono, Apolima and Savaii; area, according to recent authorities, which reduce the figures of Commodore Wilkes' survey of 1839, about 1,125 square miles; population in 1869, 35,107. Besides these, these are at the East end of Upolu four islets, Nuulua, Nutali, Taputapu and Namoa, and between Manono and Apolima an isolated islet called Niulapo.

All the islands and islets are of volcanic formation, though the latter are separated from the former by coral reefs. There are extinct volcanoes on most of the islands, and the natives have no traditions of eruptions from any of them; but in 1867, a submarine volcano burst out of the ocean between Manua and Olosinga, and for two weeks shot up jets of mud and dense columns of sand and stones to a height of 2,000 feet. It left no permanent protrusion above the bed of the sea, and it is said to be difficult now to obtain soundings on its site.

Manua, the most easterly island of the group, which has an area of about 20 square miles, rises like a dome to the height of 2,500 feet. Olosinga is a narrow ledge of rocks with a double coral reef around it, the outer shelf, 50 to 60 feet wide, and the inner in some places 140 feet. It contains but six square miles; Ofu, next to it, is somewhat larger. Tutuila is high and mountainous, with precipices rising from the ocean to a height of from 1,200 to upward of 2,300 feet. Its West end, which is lower, is covered with luxuriant vegetation and is thickly settled. On its North coast are many good ports, but the best is Pango-Pango, or Pago-Pago on the South side. It is completely landlocked, has an entrance clear of rocks, and water enough for the largest vessels. It is one of the safest and best harbors in the Pacific, and, being on the direct steamship route between America and Australia, must become in time an important port. The area of the island is about 50 square miles, and it contains, together with Anuu, an islet off its Eastern extremity, 3,500 inhabitants.

Upolu, the most important island of the group, has an area of about 335 square miles, and in 1869, had 16,610 inhabitants. A range of broken hills occupies its middle, the sides of which, covered with luxuriant vegetation, slope to the sea. Apia, on the North side, the chief town, has a population of about 300, of whom 100 are whites. It is the official residence of the various consuls, of the members of the London Missionary Society, and of the Roman Catholic bishop of Oceania. Almost all the business of the port is in the hands of Hamburg firms. The harbor of Apia is sheltered by a natural breakwater, and is second only to that of Pango-Pango. Manono, which is enclosed within the sea reef of Upolu, has an area of only 3 square miles. Apolima, about a mile distant, 2 square miles in area, is a natural fortress. It is the crater of an extinct volcano, and is a ring of perpendicular cliffs, with a single opening on the north side, through which only one boat at a time can pass to the basin within.

A few miles distant is Savaii, the westernmost and largest island of the group, containing about 700 square miles, and a population in 1869 of 12,670. Its interior, which has not been explored, is occupied by a mountain chain, in parts nearly 5,000 feet high, sloping gradually to the sea, and leaving but a strip of alluvial land a few miles wide along the shores. It has little timber and no running streams, and its shores are rocky and precipitous, with few harbors. On the north side, the bay of Mataatu affords good anchorage. A series of wonderful caves in the island have been explored for 2½ miles, but not to their full extent.

The climate is very equable, the mercury seldom rising higher than 88 degrees or falling lower than 70. From observations made in 1872 at Malua in Upolu, the mean temperature for the year was 78.33 degrees. The difference of temperature between sun and shade is seldom more than 7 degrees. Rains are distributed evenly throughout the year, excepting in January, February, and March, when heavy rain-storms with northern winds prevail; but destructive storms are rare. The soil is a rich vegetable mold, with a slight proportion of decomposed lava impregnated with iron. Excepting the shore line, the mountains, and a lava field on the East end of Savaii, there is little naked land on any of the group. The interior is covered with dense forests of tropical luxuriance, containing many varieties of valuable timber trees.

Among the trees and fruits are the banian, two varieties of pandanus, several species of palms, the anauli, bamboo, rattan, breadfruit, cocoanut, wild orange, lemon, lime, banana, plantain, yam, taro, paper mulberry, tacca (from which arrowroot is made), pineapple, viapple, guava, mango, and citron. Wild sugar-cane grows abundantly, and there are two varieties of sea-island cotton, one of longer staple than the other. Tobacco is grown in small quantities, and some coffee is raised. The ava (*macropiper methysticum*), which grows in clusters from 6 to 10 feet in height, is a species of pepper. From its dried root is made an intoxicating beverage, which when taken in small doses is a delightful soporific. There are no traces of native ammalia except a species of bat (*pteropus ruficollis*), which often measures 4 feet from tip to tip of wings. Horses, cattle and swine have been introduced. Poultry is plentiful, and pigeons abound. A bird called the tooth-billed pigeon (*didunculus strigerostris*), allied to the dodo, is found in the lonely parts of the mountains.

Among the Polynesian islands the inhabitants of the Samoan group rank in personal appearance second only to the Tongese. The men average about 5 feet 10 inches in height, are erect and proud in bearing, and have straight and well-rounded limbs; the women are generally slight in figure, symmetrical and easy and graceful in their movements. The skin of both sexes is dark olive, but the chiefs and better families are much lighter. The nose is usually straight and not flattened like that of the Malay, and the mouth is large, with thick lips. In some the eyes are oblique. The hair is black and straight. Beards are not so common as among Europeans, yet many have heavy beards. Polygamy is customary, but two wives seldom live in the same house. They are generally cleanly in their habits and social in disposition. Women are considered the equals of men, and both sexes join in the family labors. Great ingenuity is displayed in the construction of their houses, which are built of the wood of the breadfruit tree, thatched with wild sugar-cane or pandanus leaves.

The ancient religion of the islanders acknowledged one great God, but they paid less worship to him than to some of their war gods. They had a god of earthquakes, a god who supported the earth, and gods of lightning, rain and hurricanes, and also many inferior gods who watched over certain districts; and they had carved blocks of wood and stone erected in memory of certain chiefs, whom they worshiped. All are now nominally Christians; there are schools and a church in every village, and the missionaries have unbounded influence. Nearly all the children 7 years of age can read their own language, and most of the adult population can read and write. The Bible has been translated and printed, and hymn books and other works are published at the missionary printing office. According to a census taken in 1869 by the representatives of the London Missionary Society, the population was divided denominationally as follows: Independents and Presbyterians, 27,021; Wesleyans, 5,082; Roman Catholics, 3,004.

The commerce of the islands is small. The exports are coppra, or the dried meat of the cocoanut, from which oil is made, and a small quantity of cotton. Of the former about 10,000 tons are shipped annually, mainly to Hamburg. The imports are general merchandise and provisions, and some lumber from California and Oregon. Nearly all the trade is controlled by the Hamburg house of Godeffroy & Co., who have buildings at Apia and several cotton plantations in the vicinity. In 1873, 105 vessels, of 25,198 tons, entered the port of Apia, of which 47 were German, 47 English, and 4 from the United States. In 1881, the planters had about 1,800 laborers from the Line Islands, New Britain, New Hebrides, etc., the Samoans being too independent to hire themselves out. A series of petty wars, continued with little intermission from 1868, had greatly interfered with the prosperity of the native population, whose numbers have decreased from 56,600 in 1840 to 35,000 in 1872, and 30,000 in 1880.

The Samoan islands were named by Bougainville, who visited them in 1768, the Archipel des Navigateurs, from the skill of the natives in using their canoes. In 1787 La Perouse touched at these islands, and De Langle, the commander of one of his vessels, and 11 men were killed by the natives. The first missionaries landed in Savaii in 1830 from the Society islands, and in 1836 they were joined by others from England. The first Roman Catholic missionaries arrived in 1846. The islands were surveyed by Com. Wilkes in 1839. In 1872 Com. Meade visited the group and, by arrangement with the native chiefs, took the harbor of Pango-Pango under the protection of the United States. In 1873 a special agent, Mr. A. B. Steinberger, was sent by President Grant to the islands, who reported that the chiefs were desirous that the whole group should be protected by the United States; but in 1875 a native king was elected, and Steinberger became his prime minister.

OUR TREATY WITH SAMOA.

The following is the text of the treaty of 1878 between the United States and Samoa:

"The government of the United States of America and the government of the Samoan islands, being desirous of concluding a treaty of friendship and commerce, the president of the United States has for this purpose conferred full powers upon William M. Evarts, secretary of state, and the government of the Samoan islands has conferred like powers upon M. K. Le Memea, its envoy extraordinary to the United States, and the said plenipotentiaries having exchanged their full powers, which were found to be in due form, have agreed upon the following articles:

"Article 1.—Peace and Friendship—There shall be perpetual peace and friendship between the government of the United States and the government of the Samoan islands.

Article 2.—Naval Station—Freedom to Trade—Naval vessels of the United States shall have the privilege of entering and using the port of Pango-Pango and establishing therein and on the shores thereof, a station for coal and other naval supplies, for their naval and commercial marine, and the Samoan government will hereafter neither exercise nor authorize any jurisdiction within said port adverse to such rights of the United States or restrictive thereof. The same vessels shall also have the privilege of entering other ports of the Samoan islands. The citizens of the United States shall likewise have liberty to enter the same ports with their ships and cargoes of whatsoever kind.

'to sell the same to any of the inhabitants of those islands, whether natives ro foreigners, or to barter them for products of the islands. All such traffic in whatever articles of trade or barter shall be free, except that the trade in firearms and munitions of war in the islands shall be subject to regulations by that government.

"Article 3.—Duties—No import or export duty shall be charged on the cargoes of the vessels of the United States entering or clearing from the ports of the Samoan island, and no other than a tonnage duty of one-half of one per cent. per ton actual measurement shall be charged on the entrance of such vessels.

"Article 4.—Consular and Mixed Courts—All disputes between citizens of the United States in the Samoan islands, whether relating to civil matters or to offenses or crimes, shall be heard and determined by the consul of the United States at Apia, Samoa, under such regulations and limitations as the United States may provide; and all disputes between citizens of the United States and the people of those islands shall be heard by that consul in conjunction with such officer of the Samoan government as may be designated for that purpose. Crimes and offenses in cases where citizens of the United States may be convicted shall be punished according to the laws of their country; and in cases where the people of the Samoan islands may be convicted, they shall be punished pursuant to Samoan laws and by the authorities of that country.

"Article 5.—Intervention—If, unhappily, any differences should have arisen, or shall hereafter arise beeween the Samoan government and any other government in amity with the United States, the government of the latter will employ its good offices for the purpose of adjusting those differences upon a satisfactory and solid foundation.

"Article 6.—Privileges—The government of Samoa agrees to allow to the government and citizens of the United States free and equal participation in any privileges that may have been or may hereafter be granted to the government, citizens, or subjects of any other nation.

"Article 7.—Duration—The present treaty shall remain in force for ten years from its date. If neither party shall have given to the other six months' previous notice of its intention then to terminate the same it shall further remain in force until the end of twelve months after either shall have given notice to the other of such intentions.

"Article 8.—Ratification—The present treaty shall be ratified and the ratifications exchanged as soon as possible. In faith whereof, the plenipotentiaries have signed and sealed this treaty at Washington, the seventeenth day of January, one thousand eight hundred and seventy-eight.

"William Maxwell Evarts.
"M. K. Le Memea."

Within a year or two afterward somewhat similar treaties had been made with Germany and Great Britain, by which these governments obtained like privileges in other portions of the islands. So that each of these three great commercial nations secured by treaties (following each other rapidly), privileges somewhat similar in character but in different localities—each securing a coaling station and harbor.

It had been entered into between Great Britain and the government of Samoa (but the German and American governments were also included in it), by which the town and district of Apia were constituted into a municipality and were declared to be neutral territory, where each of the three nations might establish their store-houses, their work shops, and all other buildings necessary for carrying on their traffic in those islands. This territory of Apia was now known as the capital of the Samoan islands and was set aside for commercial purposes—the government of Samoa being practically excluded from it. The municipal board consisted of the German, English and American consuls. This treaty or agreement had not been submitted to the senate, but had been signed by the English consul and by the captain of the American ship-of-war Lackawanna. It had been acted upon by the three nations as in the nature of an agreement for the possession and occupancy of that neutral territory.

There has always been a sort of quasi war existing there between several branches of the people. It was a strange government, controlled largely by family ties, somewhat aristocratic, with contentions always existing between the various chiefs. It seemed to be the general opinion of all the American consular agents who had been sent there to examine into the nature of the government, that the people were totally unfit to conduct a regular formal government. The civil war had continued until, finally, in 1883, by the aid of the consuls, it was settled by an agreement that Malietoa should be king, and Tamasese vice king.

Soon after that settlement other difficulties had arisen, and a movement had been made to annex the Samoan islands to New Zealand—Malietoa sending an humble appeal to Queen Victoria asking for such annexation. The German government, however, had remonstrated in the most vigorous manner against it, insisting that it would be a violation of the treaty. Some time after, a conference was held in Washington between Mr. Bayard and the British and German ministers, and each country sent an agent to the islands to obtain further information.

It is claimed that the rebellion of Tamasese had been organized by the German consul and by a German named Weber, who was at the head of a large commercial house.

A German fleet arrived at the islands some time in May, 1886. Some time after this, United States Consul Greenbaum raised the United States flag, at the request of Malietoa, over the public buildings in Apia. For a time the practical effect of that action (unauthorized as it was), had been to check the action of the German local authorities.

After the German fleet had sailed away, the German and American consuls had again joined in a declaration that Tamasese had never been recognized by either of them as king, and that Malietoa was king.

This act had been wholly without authority, and Mr. Greenbaum's part in it had, very properly, been disavowed by the American government, as he had no more right to assert a protectorate there than the German and English consuls had. It was while the agents of the three conferrees (Mr. Bayard and the English and German ministers), were engaged in obtaining information that the German government deposed Malietoa and set up Tamasese.